

American Aviation

The Independent Voice of American Aeronautics

MARCH 1, 1947

The Real News

SOMEWHERE in the maze of today's immediate problems the great history-making events of U. S. aviation are being overlooked.

Air transportation is still the great story of the era in which we are privileged to live. The swiftness, ease and comfort with which great numbers of people are moving over large areas of the world above the hazards and impediments of tedious surface travel, is still the modern miracle of lasting importance to mankind.

Fortnightly Review

Ten and 20 years ago front page news articles announced the plans and predictions of aviation pioneers who said the oceans could be flown regularly and safely and that eight to 10 hours flying time across our own country would become a reality. It is unfortunate that the fruition of the dreams of pioneers often receive but scant attention while unimportant and incidental mishaps are given space far out of line with their actual consequence.

The future of aviation is still unlimited and there is no room for pessimism. But most important, aviation history is being made almost every week. Not all of it is in the distant future. One wonders if the national press is really alert to the historic advances being made by U. S. aviation in the crucial postwar period—whether the press recognizes the historic significance of the expansion of U. S. air transportation within and without our country.

We all need a morale uplift lest we forget the true progress being made.

Take for example the new air route to the Orient. Northwest Airlines has been surveying the route and will begin regular commercial service a few weeks hence. The opening of the Northwest Passage to the Far East is certainly, in the light of world history, a truly famed achievement sought for centuries by men of the west seeking new routes to the east. If an accident involving the deaths of a few people is front page news, what of the news evaluation of the opening of the Northwest Passage by air to the East? Its importance to commerce, to the United States, to communications, to world understanding, can hardly be exaggerated. This is the real aviation news of 1947.

Take as another example the opening of regular commercial service to Ankara, Turkey, by Pan American Airways. It rated but a few scant lines in the press. Yet is it not important news when an American flag

(Turn to page 6)



Explains All-Weather Needs

Milton W. Arnold, Air Transport Association's vice president-operations and engineering, has had the responsibility of presenting to Congressional committees the airline industry's views on the technical aspects of all-weather flying, and has been credited with doing an excellent job. The committees have recommended expenditure of funds for necessary aids.

In This Issue

**Airlines Show Heavy Loss
For 1946 13**

**G. I. Flight Program Continues
Strong 16**

**Air Forwarders Pose Knotty
Problem 20**

DEPARTMENT OF COMMERCE



**"Check her over . . . we're
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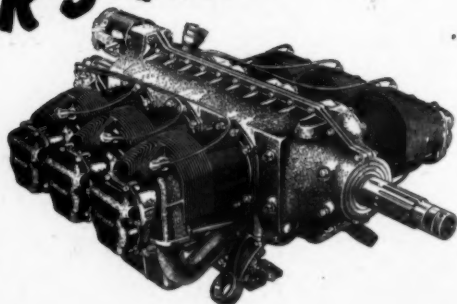
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MORE AIRCRAFT LAND ON GOODYEAR TIRES
THAN ON ANY OTHER KIND

American Aviation

Volume 10 Number 19

The Independent Voice of American Aeronautics

March 1, 1947



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Other Publications and Services:

American Aviation Daily: The only daily news service for the aviation industry. Published daily except Saturdays, Sundays and holidays since 1939. Dispatched via airmail or surface mail for overnight delivery in the United States. Subscriptions: \$15 one month, \$170 one year. Airmail delivery to points outside the United States at additional cost to cover postage. Service Bureau available to all subscribers. CLIFFORD GUEST, Managing Editor.

International Aviation: A weekly newsletter of aviation trends and news in foreign countries. Published on Friday of each week and dispatched via first-class surface mail. Editorial representatives in foreign capitals. Subscriptions: \$100 one year (\$2 issues). Airmail delivery available at additional cost to cover postage. Service Bureau available to all subscribers. FRANK M. HOLZ, Managing Editor.

American Aviation Directory: Published twice a year, Spring and Fall. Complete reference data on administrative and operating personnel of airlines, aircraft and engine manufacturers, accessory and equipment manufacturers, organizations, schools, U. S. and foreign aviation groups and departments, etc. Completely cross-indexed by companies, activities, products and individuals. Single copy \$5.00. Fall-Winter 1946-47 issue now available. DAVID SHAW, Managing Editor.

American Aviation Air Traffic Guide: Monthly publication of airline schedules, rates and regulations for passengers and cargo transportation by commercial air transport. Supplements furnished subscribers covering changes occurring between issues. Subscriptions: U. S. and Latin America \$7.50 one year (\$2 issues and supplements); Canada \$8.00. All other countries \$9.00. Published and revised from editorial offices at 139 North Clark Street, Chicago 2, Illinois. (Telephone: State 2154). H. D. WHITNEY, Managing Editor.

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AMERICAN AVIATION



Wings Over Baltimore

The Coming Of An Age

Men of vision and spirit forged early aviation history—forge it today. The name of Glenn L. Martin stands high in aviation's list of men of vision and spirit, of inventive genius and daring. As a boy he turned his dreams of flight into biplane kites; as a young man, into gliders and airplanes. And that ability to transmute imagination into master aviation accomplishments always has characterized him and the company which bears his name.

In 1909 Martin constructed his first plane, taught himself to fly—and initiated a series of Martin aviation "firsts." He went on to fly the first air mail (1912); make the first extended over-water flight (1912); drop the first bombs from an airplane (1913).

Up From The Model T T

Meanwhile the practical knowledge acquired in the air was being built into his planes designed primarily for sportsmen until 1913. In that year of war alarms in Europe, the Army awarded him its first order for a training and bombing plane, the famous Model T T, progenitor of the famed Martin "Marauder," "Mariner" and "Mars" of another, later war. In that transition period Martin engineers maintained the company in the forefront of its field—produced, among other firsts, the nation's first two-engine bomber; the first

experimental mail plane; the first all-metal seaplane; the famous "Clippers."

2-0-2's and 3-0-3's

Many factors, in addition to the vision and enterprise of its founder, combined to establish the growth, great wartime record and strong postwar status of the Glenn L. Martin Company. Not the least of these were the large amounts of capital acquired through investment banking channels. In 1938, Martin was a successful but—contrasted with its size today—relatively modest enterprise. Smith, Barney & Co. in 1938 underwrote a public offering of Martin stock which, following similar broadened financing during preceding years, enabled the company to enter the critical war period prepared to send Martin bombers swarming over enemy troops and territory. This laid the groundwork, too, for the company's entry into the postwar period with the flexibility adequate capitalization provides, permitting extraordinarily quick reconversion and rapid production of the already famed commercial airlines, the Martin 2-0-2's and 3-0-3's, which will go into

service in the country's leading airlines during 1947.

Orders for these already have passed the 345 mark, exceeding the prewar total of all aircraft in domestic scheduled airline operations. This takes on added significance when it is realized that today Martin has over 17,000 employees with an annual payroll of more than \$120,000,000, a great contribution not only to Baltimore but also to the whole American economy.

To tell more of the details of the progress of this company, we have prepared a booklet, "An Analysis of the Glenn L. Martin Co.," which may be obtained on request to Department J, Smith, Barney & Co., 14 Wall Street, New York 5, N. Y.

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Editorial

(Continued from Page 1)

airplane begins putting in appearance regularly at the capital of Turkey in strategic Middle East? Is it not of historic importance that an American airline carries the American flag through Europe and on to Ankara as another step toward round-the-world service?

And again, look at the record of American Overseas Airlines for its first full year of operation in 1946. For every single day of the year it averaged 93 passengers across the Atlantic. It is a modern miracle of transportation which, unfortunately, we are taking for granted so very casually. For decades there were dreams of flying the Atlantic, to save days of travel time for business men, commerce and governments. Yet when the Atlantic is conquered to the tune of 93 passengers per day on just one of the eight trans-Atlantic airlines, both public relations departments and the press fail to place this great record in proper historic perspective. Are we so jaded that we can no longer evaluate the events of lasting value to our civilization?

Very soon now there will be another historic shrinkage in travel time between our own coasts. For the first time airliners will speed across the continent at 300 miles an hour. We hope this new transition in speed will be noted adequately in the press, for place it beside the pony express, the stage coach, the railroad and the early airline service, and we have progressed far in bringing all our communities close together.

We mention all these things because a feeling has been growing in many places that our airlines are just a group of commercial-minded private companies trying to grab up things at somebody's expense. It is true that our airlines are private companies, but this is the American system of superior development in the public interest. There is an ugly feeling growing in too many quarters that anything private and commercial is, per se, just bad.

One finds this "anti" feeling in some sections of government, especially among the bright boys of Civil Aeronautics Board where there is a tendency toward negation, toward suspicion, toward skepticism. The CAB boys below the Board itself seem to go on the assumption that they must quibble over every detail, put the heat on the companies as much as possible, and make the companies skimp along on the barest necessities. How little they know of the pioneering, the headaches and the heartaches, that have gone into the building of an air transport system. How often they quibble about pennies when a constructive and positive outlook would mean dollars for the nation.

One finds this "anti" feeling in such places as the railroads. With what brash thoughtlessness did the assistant to the president of the New York, New Haven and Hartford Railroad write to an inquirer that he was sending under separate cover "copies of material issued in connection with our Anti-Airline Campaign." Is this railroad really trying to destroy and injure a transport system which is a vital arm of the national defense? Does it want to answer a charge that it is conspiring against the nation? Compete for passengers, yes. Competition and rivalry are fine. But anti-airline campaign—what utter stupid nonsense!

Despite thoughtlessness, narrow news evaluation and the hindrance of small minds who want to block rather than help, air transportation will move far ahead in

1947. American airplanes will be flying to all parts of the world. The American public will have better air service throughout our own country. American crews and American technicians will become better and larger in numbers. There will not be a month during this year when real transportation history is not being made in the national interest. Let's handle our pressing problems of the moment, but let's also not forget the historic significance of the progress being made.

Tale of Two Cities

THE POLITICIANS are having a field day at two of the major airports of the country.

In Chicago, where the retiring Mayor, Ed Kelly, tried to make his city an important air center, the minor-league politicians have done a fine job of tying up airport progress with red tape and all that goes with red tape in the Windy City. If ever a non-political and business-like airport authority were needed, it is needed in Chicago.

In Miami there is a Dade County Port Authority which doesn't seem to have anything to do with ports, but did get hold of the city's airport used by the airlines. The director of the authority is Marcel Garsaud, whose lack of knowledge of aviation and airports might be excused were he not abusing the privilege of ignorance by trying to be an expert. Headache is a mild word for what he's causing the airlines. A little common sense could put Miami's airport situation on the beam in nothing flat. As long as Marcel "Woo Woo" Garsaud is grandstanding for the Dade County Port Authority, Miami will have the unenviable reputation of having one of the sweetest airport messes in the country.

WAYNE W. PARRISH

Praise at Last

THE LOCKHEED Constellation, a much-abused and criticized airplane since its temporary grounding by the Civil Aeronautics Administration last year, has finally come in for its share of praise. True, the praise is late, but it's better than never.

William A. M. Burden, Assistant Secretary of Commerce for Air, said in a letter to the House Interstate and Foreign Commerce Committee last month that the Constellation is "a famous name that attracts disproportionate attention to occasional mishaps." The flight testing of this airplane, he pointed out, showed a total of 4,670 hours, or 1,401,000 miles of test flying before regular commercial service was inaugurated. And the "dramatic action of grounding" and the resultant publicity has worked an undue hardship on the airplane, "without question one of the world's outstanding transports," he stated.

What Mr. Burden did not admit was that inexcusable bungling and blundering on the part of both CAA and Civil Aeronautics Board personnel was responsible for the large black headlines last summer announcing that the Constellation had been permanently grounded. Nevertheless, he is to be commended for putting in the record a statement long overdue.

ERIC BRAMLEY
AMERICAN AVIATION

FIRST ESCORTED AIR TOUR

Advertisement Printed in the New York
Herald-Tribune, September 7th, 1927



DE LUXE AERIAL TOUR NEW YORK - CHICAGO for the TUNNEY-DEMPSEY FIGHT

Every now and then somebody does something first. The world's oldest Travel Service now announces the first Sport Airplane Cruise from New York to Chicago and return for attendance at the Tunney-Dempsey championship bout, on September 22. A fleet of the most modern cabin-cruiser-type airplanes has been assembled and manned with expert pilots of long experience, licensed by the United States Department of Commerce.

These latest model cabin planes are equipped with every necessary passenger convenience, including comfortable chairs and observation windows from which to view landscapes, clouds and strange light effects. The air cruisers will take off from Curtiss Field, near Garden City, at 8 A.M. daylight saving time on September 22, and reach Chicago early the same evening.

The specially reserved choice ringside seats which are provided will ensure a full unobstructed view of the contest.

In Chicago, the pioneer sport-aeronauts will stay at the new and magnificent Hotel Stevens, the world's largest hostelry. On September 23, the morning after the Tunney Dempsey match, the party will return to Garden City, arriving there early in the evening. Each passenger may take thirty pounds of baggage.

Inclusive Fare, \$575

It is worthy of special mention that this is the first public aerial tour; it is inspired by the large experience which Cook's Travel Service has gained in this field, having been identified since 1919 with many forms of successful commercial aviation.

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Wings of Yesterday

25 Years Ago

At Topeka, Kans., N. D. Trinler ascended 17,900 ft. in 140 minutes in a Longren biplane equipped with a 60 hp Lawrence motor. (March 6, 1922.)

Maj. Gen. Mason M. Patrick, Chief of Air Service, made an inspection of Army Air Service stations in the southwest, using a DH-4-B airplane. (March 6, 1922)

The Goodyear AC blimp was successfully tested at Akron, O. (March 15, 1922.)

15 Years Ago

The Graf Zeppelin flew from Friedrichshafen, Germany to Pernambuco, Brazil and return. (March 21-29, 1932.)

Letters

DC-3 Record Challenged

To the Editor:

I have just finished reading your article on Ethiopian Airlines, Inc., in the Jan. 15 issue of *American Aviation*. I noted that EAL thinks it has the world's record for the longest non-stop commercial DC-3 flight, from Cairo to Asmara, which is 1120 miles. I wish to point out that Capt. Nelson U. Rokes and 1st Officer J. Thibaut have, for the past seven months, been flying a DC-3, NC6K on special contract, non-stop from Omaha, Neb., to Albany, N. Y., which is 1161 miles, and occasionally non-stop from Richland, Wash., to Omaha, Neb., which is 1353 miles. Also we often fly non-stop from Cleveland, O., to Cheyenne, Wyo., which is a distance of 1196 miles.

It would appear, then, that we hold the world's record for the longest non-stop commercial DC-3 flight.

NELSON U. ROKES
Vice President
Superior Air Lines, Salem, O.

Significant Step

To the Editor:

The Feb. 15 issue of *American Aviation* contained a small story on the awarding of permission to negotiate for landing rights with the Mexican government to the three United States carriers duly certificated to fly there. It is my belief that this joint Civil Aeronautics Board-State Department grant may represent a significant step in the evolution of an American international air transport policy, and that as such, it is entitled to additional consideration and analysis.

During the decade of the 1930's, Pan American Airways carried the American flag through the global skies. That company negotiated its own franchises in almost every instance, and was especially successful in the Latin states south of the border. But as the swift tide of international affairs made it increasingly obvious that many countries were utilizing their air transport operations as instruments of national policy, our government resolved that the negotiation of foreign franchises must be arranged through official channels. This decision was announced in a joint CAB-State Department memorandum issued on Oct. 15, 1943.

That oft-quoted document contained a certain amount of flexibility, for it permitted private U. S. airlines to negotiate if special circumstances were found to warrant it. At

the time of its publication, the joint memorandum was subject to bitter criticism from the experienced diplomatists of Pan American. This discussion ebbed as other problems appeared, and the matter seemed finished until the TWA negotiations with Italy stirred up such an international commotion. After some friction with our British allies, this issue was resolved.

Now there is the Mexican case. The special team of men sent south by the CAB and Department of State last summer met with no success. There have been numerous reasons advanced for the failure of this mission, some suggesting that certain American carriers were involved in an effort to exclude Braniff, Eastern, and Western. There was a strong rumor that CAB Chairman James M. Landis might go to Mexico City himself to complete the deal.

In light of its rigid adherence to this policy in the past, this recent action of the federal administration might well be viewed as an admission of the failure of the United States government in this affair. It does not mean that the entire policy has been unsuccessful, or that it should be discarded. It would seem, however, that the time is ripe for a new evaluation of American international air policy. This in no way reflects upon the tremendous achievements of the Board or of the Aviation Division of the Department of State, which must be regarded as even more remarkable in light of the limited funds Congress has made available for long term planning.

This incident would seem to provide perfect grist for a contemplated National Air Policy Board, to be set up to study the aims and results of the U. S. aviation program. It is clearly a matter for Air Coordinating Committee study, which it has doubtless already received. If this affair is seen in this context, we may profit by the experience and further facilitate the progress of American international civil air transport operations.

WALTER H. WAGER,
Attorney, New York City.

Books

THE OFFICIAL PICTORIAL HISTORY OF THE AAF. By the Historical Office of the Army Air Forces. Duell, Sloan and Pearce, New York. 213 pp. with 600 photographs and many full color illustrations; \$10.00.

It is difficult to discuss this volume without dealing in superlatives. It is official as its title indicates, but it is also far more than that. It is something new in an official history. Like many another AAF operation, it has been beautifully executed after long and careful planning. It represents several years of coordinated work by a corps of AAF specialists, directed and counseled by veterans of the AAF from top generals down.

As Gen. Carl Spaatz, commanding general, Army Air Forces, says in a foreword "This graphic presentation of our air power should quicken the pride of every American. For airmen it is a faithful record of significant developments in equipment over the four decades since the first flight. It illustrates the past of the air force in which so many gallantly served. Its wide appeal, however, is to the air consciousness of the American people, who, in the fullness of their vigorous strength and imagination, are now demonstrating their fitness as a nation to enter a new period of world history—the true Air Age."

This book tells the story of military aeronautics in the United States from the early 19th century—when balloons were the first weapons of the Army—through World War II.

This official history is several books in one. It is the first complete graphic record of the development of American military aviation. It is the story of the scientists, technicians and workers and industrialists who made U. S. air power possible. It is a tribute to the men of the AAF.

The book is conveniently divided into six parts. It starts with the use of balloons, turns to the pioneers of power flight, who developed the nation's next air weapon. There

is a comprehensive section on World War I, the story of the development of men and planes. A fourth part deals with the period between the two wars and up to the section on the decisive role in World War II which wins recognition for air power.

All phases are covered, starting with Pearl Harbor, early stabs at the Japs, AAF headquarters, transition training, experimental centers, Air Transport Command, Air Technical Service Command, aerial photography, the anti-submarine command, the stories of the various air forces, victory in Europe and V-J Day and after.

The final section of the book deals with the industrial and scientific know-how that makes U. S. airpower possible.

Special credit for this volume is due Maj. John T. McCoy, Jr., who performed the chief editorial duties and is responsible for the selection of photographs, book design and paintings, and to Lieut. Col. Bayard Still, who edited the text. Capt. William S. Newman prepared the catalog of military aircraft, and S/Sgt. David H. Stech and Mrs. Wilhelmine Burch gave layout and editorial assistance.

All royalties from the sale of this book will be assigned to the Army Air Forces Aid Society.

—S. H.

JEeps IN THE SKY. By Lt. Col. Andrew Ten Eyck. 150 pp. Commonwealth Books, Inc., New York. \$3.00.

Here is a worthy book, the story of the lightplane in the war—the story of the "grasshoppers" or the "flying jeeps." And Col. Robert L. Scott of "God is My Copilot" fame has written a foreword. All royalties from the sale of the book will go to the Army Air Forces Aid Society.

Col. Ten Eyck has had access to all official source material for his authentic record of the grasshopper achievements. It is well that the pioneering work of John E. F. Morgan, William T. Piper, Col. John C. L. "Tex" Adams and others is recognized with this permanent history because, as Col. Scott says, the performances of the "tough little planes and stout-hearted pilots helped win the war and will go down in aviation history." The versatile light airplane was a long time in being accorded recognition for what it could do in modern warfare. But the book provides ample evidence that the grasshopper is here to stay as an essential tool of war.

Obituary

William P. Redding

William P. Redding, 62, former National Aeronautic Association executive, died at the Mayo Clinic, Rochester, Minn., on Feb. 17. He was widely known for his work as executive secretary of the Interstate Airways Committee which played an important role in passage of the Civil Aeronautics Act of 1938. Redding was NAA treasurer from 1940 to 1942, when he was named executive vice president. He resigned the latter position in 1943, and resumed the treasurer post, serving in that capacity until July 1946.

Col. Earle L. Johnson

Col. Earle L. Johnson, 51, national head of the Civic Air Patrol was killed in an airplane accident 25 miles south of Cleveland, O., on Feb. 16. Col. Johnson had been on active Army duty with CAP since March, 1942, and before the war was director of aviation for Ohio. He was touring CAP units around the country at time of his death.



TRANS-AUSTRALIA AIRLINES

orders 5 new Convair-240's!

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It was only natural that in its search for such an airliner Trans-Australia Airlines should turn to Consolidated Vultee—the company which designed and built the famed long-

range Liberator bomber, the Catalina, the Coronado, and other well-known war planes—the company which operated a vast trans-Pacific airline service for the Air Transport Command during the war.

The wonderful new Convair-240 will carry 40 passengers at 300 miles per hour at low-level comfort regardless of altitude. But that's only part of the story...

Below, you'll find eight of the many reasons why the Convair-240, with its many innovations, speed, and comfort features, establishes a new concept of "Air Travel for Everybody"!

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6. Heated wings prevent icing!
7. Lands level!
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Background and Trends

(Significant Developments and Forecasts Based on the Fortnight's Top News)

Sensation: Secrecy lid will be off a six-engined jet bomber when it is wheeled out of an important factory in a short time. Biggest surprise is that the bomber is almost as big in size and gross weight as the B-29. It's likely to be the 1947 sensation in military aviation.

Air Mail Tip: Go and get the business mail, if you want to up your mail loads, is the Post Office's advice to airline air mail managers. Recent PO survey in 14 large cities showed 65% of originating air mail was social correspondence, only 35% business.

Freight Balance: That old air freight bugaboo—big westbound loads, little eastbound loads—is on the way to being overcome. Both scheduled and non-scheduled air carriers are reporting success in filling hitherto unused eastbound space. For example, American Airlines' eastbound air freight out of Los Angeles has hit 125,000 lbs. a month, matching westbound tonnage.

Budget Cuts: Airlines are doing plenty of trimming on their overhead budgets. Publicity, advertising and traffic departments are being hit in most companies.

More Revenue: U. S. airlines flying overseas are anxious to get air parcel post operating on a wide scale. TWA has been getting as high as 800 lbs. of parcel post on its one weekly trip from Switzerland to the U. S., and it's welcome revenue. Establishment of service from U. S. to foreign points can't start until Civil Aeronautics Board decides how much the airlines are to be paid for carrying this class of mail.

Another Name: Civil Aeronautics Administration has asked Congress for authority to supervise air traffic flow control. CAA may call it "flow control," but Air Transport Association says a better description is "government dispatching." ATA will fight the proposal tooth and nail.

Saving Space, Money: Pennsylvania-Central Airlines is hepped up about its new simplified reservations system. Says it's saving space and money. In New York, reservations space has been cut from 3,500 sq. ft. to less than 1,000. Personnel is down from 78 to 33.

New York Problem: Aviation interests are plenty worried about an ordinance proposed by a New York City commissioner to make aircraft and helicopters fly at minimum altitude of 2,500 ft. over congested areas of the city, and 1,000 ft. over other areas, except during landing, take-off and emergency. There hasn't been much publicity on the proposal, but behind-the-scenes opposition is strong.

Forgotten Men: Some co-pilots who attended the Air Line Pilots Association convention in Chicago last month expressed belief they are the forgotten men of the air transportation age. They say new wage schedules recently placed in effect and prospective settlements in pending cases greatly favor the flyers who occupy left hand seat in the cockpit.

Live Issue: Channeling of airport funds is far from a dead issue. State aviation officials say cities generally are in bad shape financially, and look to state government for the lion's share of matching funds. They resent prohibition in Federal Airport Act which prevents states from dealing directly with Federal government.

Weather Aid: If technical committees of National Association of State Aviation Officials have their way, private pilots will receive special Weather Bureau reports for point-to-point flights. New use of CAA communication facilities would provide them with detailed weather information for specific areas, as well as special emergency service.

Pilot-AA Pact: Look for early signing of a new contract between pilots and American Airlines management. Agreement practically had been reached when negotiations were postponed because of ALPA convention.

Standardization Problem: Important question in standardization of cargo airplanes for military and commercial use is whether the industry economically can support the type plane required by Army. The joint Army-industry-government committee formed last fall still has the problem under study with many details to be worked out.

RFC Aid: The airline-railroad battle may reach a new phase if Congress goes through with proposals to investigate the financial situation of the airlines. Many members of Congress feel strongly that RFC should aid the airlines, since it has not hesitated to lend financial assistance to distressed railroads.

Pilot Seniority: There was considerable feeling at recent Congressional hearings that management should be permitted greater control over pilot promotion than allowed under present seniority system. Possibility exists that House Interstate and Foreign Commerce Committee may investigate entire question to determine whether best pilot material is being utilized.

Looking Up: Airline traffic is definitely on upgrade, according to scattered reports. Despite poor conditions in January, passenger traffic that month was 20% higher than same month of 1946.

Northwest Optimistic: First survey flight of Northwest Airlines over its Alaskan route to the Orient reports operating conditions excellent. It returned exactly on schedule. Company expects to start regular commercial flights in May. Traffic potential is reported high and company is highly pleased at outlook.

Gas Turbine Tests: Wright Aeronautical is studying a B-17 Fortress to test its new big gas turbine engine which has developed thrust equivalent to over 7,500 hp on the block. The turbine will be put in the B-17 nose so the plane can operate alternately with four conventional engines and the turbine—or all five. It'll be an odd-looking bomber with five props out in front. Wright officials have great hopes in their prop-jet although it is still in early developmental stages.

Pessimistic on Feeders: Post Office Dept. thinking on feederlines is pessimistic, and has been for some time. PO, of course, considers only the mail, on which it pays the bill. It fears that too much expansion will result in mail payments to feeders, without corresponding revenue, that might put the whole air mail program in red.

First Freight Terminal: First real air freight terminal in the country may soon be under construction at a major airport in the southwest. It's proposed by a company already well established in other aspects of aviation. Scheduled and non-scheduled freight carriers have shown considerable interest.

Cohu and TWA: LaMotte T. Cohu, general manager and chairman of the board of Northrop Aircraft, Inc. and a TWA director, hasn't been asked to be president of TWA and isn't considering it. Rumors following Jack Frye's decision not to stand for reelection (covered elsewhere in this issue) were that the Hughes interests favored Cohu for the TWA job.

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Airlines' 1946 Deficit Hits \$3-4 Million

Official Reports to CAB Show Record Losses in Face Of Peak Traffic Marks Achieved; EAL, UAL Biggest Earners

By LEONARD EISERER

The extent of the domestic airlines' profitless traffic boom of 1946 may now be measured from official reports filed with the Civil Aeronautics Board which point to an aggregate industry loss well in excess of three million dollars. This record loss is in the face of all-time peaks attained in passenger travel and express-freight volume, shown for each carrier in the table below.

While only a handful of December financial statements have thus far been received by CAB, a survey of the latest returns available reveals an overall loss of \$2,736,000. Since only six reports for the final month are included in this total, year-end returns still to come should increase the deficit well past the three million mark, possibly closer to four million.

By comparison, the same carriers turned up a net profit of more than \$17,000,000 in 1945 when only two finished in the red.

Of those with complete reports in for the year, National Airlines showed the largest net profit of \$753,183, followed by Mid-Continent with \$238,334.

All American Aviation registered a \$170,833 net loss on its air pick-up service, while Delta lost \$110,463.

Eastern and American proved to be the biggest earners for the 11-month period, with net profits, after all

charges, of \$4,269,756 and \$2,488,076, respectively.

Three airlines had net losses of more than a million for the period ending Nov. 30. TWA was heaviest loser reporting a \$6,576,996 deficit for its domestic operations alone. More than three million of the company's operating loss resulted in October-November when the airline was hit by its pilot strike.

Pennsylvania-Central Airlines reported the second largest loss with \$1,745,359.

However, while the unprecedented expenses of reconversion in 1946 pushed the domestic airlines into the red for the first time since 1938, complete official traffic reports depict remarkable records achieved in the first postwar year.

Counter to an overall 20% drop from 1945 in passenger traffic handled by U. S. rail-air-bus and water lines, the air carriers themselves boosted their revenue passengers carried by 85%, from 6,600,000 to 12,250,000, their revenue passenger miles by 69%, from 3,505,000,000 to 5,954,000,000.

With available seat miles soaring 90% to outdistance the 69% gain in revenue passenger miles, the industry revenue passenger load factor declined from 87% in 1945 to 78%. Under pre-war operating cost conditions, the 1946

load factor of 78% would have been more than enough to net a substantial profit. Looking backwards, the airlines netted a better than three and one-half million dollar profit in 1941 with an average load factor of only 59%.

The heightened interest in air cargo last year is reflected in the 86% boost in express-freight ton miles over the previous year. Express-freight ton miles totaled 43,118,000 last year, compared with 23,176,000 in 1945.

Airline Profits, Losses for 1946

All American	\$ 170,833 loss
American*	359,580
Braniff*	3,968
Caribbean	126,545 loss
Chicago & Southern*	1,496,667 loss
Colonial*	571,851 loss
Continental	34,666
Delta	110,463 loss
Eastern*	4,269,756
Hawaiian*	461,681
Inland*	20,953 loss
Mid-Continent	238,334
National	753,183
Northeast*	254,678 loss
Northwest*	424,766
PCA*	1,745,359 loss
Pioneer*	293,023 loss
TWA*	6,576,996 loss
United*	2,488,076
Western*	402,798 loss

TOTAL \$2,736,156 loss

* 11-month period through November.

Summary of U. S. Domestic Airline Traffic Results for 1946

AIRLINES	REVENUE PASSENGERS	REVENUE PASSENGER MILES	AVAILABLE SEAT MILES	PASSENGERS LOADED	MAIL TON-MILES	EXPRESS TON-MILES	FREIGHT TON-MILES	TOTAL TON-MILES	TRUCK TON-MILES	AVAILABLE FLOWN	% AVAILABLE	REVENUE PLANE-MILES	SCHEDULED MILES	% SCHEDULED	TOTAL PLACES
All American	2,485,589	1,307,506,611	1,603,199,044	81.6%	35,122	15,853	20,961	221,679	22.9%	1,752,125	1,863,104	93.5%	13		
American	538,685	212,921,504	276,896,116	76.5%	705,855	614,056	237,738	23,097,582	68.5%	64,054,568	63,497,441	96.8%	137		
Braniff	49,753	3,028,979	6,820,484	44.4%	2,951	2,456	3,486	30,327,172	77.4%	11,684,621	11,551,093	97.9%	30		
Caribbean & S	350,296	137,643,727	196,289,556	70.2%	363,727	516,920	75,509	14,656,170	31.5%	41,730	394,130	93.1%	3		
Colonial	154,398	45,592,519	63,239,621	72.1%	87,894	61,350	4,752,253	6,619,375	72.0%	3,268,060	3,401,927	90.2%	17		
Continental	204,602	75,622,816	112,306,913	67.3%	163,434	71,684	7,916,367	12,337,916	67.3%	5,331,075	5,530,283	97.3%	12		
Delta	509,219	209,582,733	292,801,826	71.6%	761,397	532,056	21,903,261	42,026,180	55.3%	11,091,259	11,451,116	96.5%	24		
Eastern	1,949,965	803,026,289	1,037,209,828	77.4%	3,155,936	3,490,701	88,649,810	127,671,323	70.5%	41,433,193	40,437,696	96.9%	73		
Hawaiian	248,977	35,001,337	41,291,484	84.8%	31,060	110,576	3,617,401	5,379,022	67.9%	2,005,116	1,466,491	98.2%	9		
Inland	89,147	22,362,113	36,181,088	61.8%	23,641	20,284	4,669	2,330,378	62.2%	1,980,597	2,047,788	97.1%	13		
NCA	249,672	75,570,341	104,240,610	72.5%	215,466	135,511	8,134,065	11,365,223	73.4%	5,278,893	5,378,143	97.7%	12		
National	294,415	173,625,990	221,901,695	78.2%	645,531	299,393	96,792	18,788,378	55.3%	3,134,334	3,463,902	90.6%	18		
Northeast	417,095	83,848,737	127,502,161	65.8%	67,399	114,251	7,267,369	12,336,100	61.4%	4,177,375	4,909,727	82.9%	14		
Northwest	631,398	385,896,473	440,090,298	80.4%	2,049,659	1,344,026	87,775	41,181,283	72.4%	18,363,337	18,768,621	97.9%	41		
PCA	1,342,890	373,331,446	532,935,340	70.0%	648,333	1,483,464	572,400	36,472,866	60.7%	17,697,895	18,463,198	93.5%	54		
Pioneer	20,687	5,903,660	14,701,868	41.6%	13,446	6,539	949,434	1,179,812	49.5%	979,312	1,065,326	90.9%	12		
TWA	885,309	744,290,703	890,096,814	81.6%	6,944,934	3,934,438	2,196,688	85,642,067	76.6%	41,020,618	40,587,110	95.9%	88		
United	1,754,164	1,067,377,742	1,269,918,471	64.1%	9,627,943	5,624,719	4,445,080	122,642,911	67.1%	99,096,144	96,135,494	95.3%	109		
Western	481,155	191,660,078	267,277,033	71.7%	652,051	422,109	168,916	20,546,237	64.9%	8,613,585	8,814,917	96.6%	26		
TOTALS	12,250,400	5,954,918,358	7,574,388,210	78.6%	33,069,830	23,881,996	237,940	660,079,942	99.7%	316,182,574	313,640,863	95.9%	723		

* As of December 31, 1946.
** TWA Operations were suspended from October 21 to November 15 because of pilot strike.

* As of December 31, 1946.

** TWA Operations were suspended from October 21 to November 15 because of pilot strike.

Jack Frye Quitting as President, Director Of TWA Following Policy Clash with Hughes

Unable to reconcile his differences with Howard Hughes and the Hughes Tool Co., TWA President Jack Frye announced Feb. 21 that he would not stand for reelection either as president of the airline or as a member of its board of directors.

Frye, who has spent 20 of his 42 years with TWA and its predecessors and who has been president for the past 12 years, said flatly that he was not in agreement "with the policies of the controlling stockholder (Hughes Tool) with respect to the financing of TWA and the operation of its worldwide routes."

Hughes representatives in Kansas City also announced the resignation of E. Lee Talman, senior vice president. At press time, there was no indication whether Paul Richter, executive vice president, would remain with the company or resign. Richter has been on vacation. It was reported that he had been offered a job by American Airlines.

Frye and Talman "will probably continue in consulting capacities," according to a statement by a Hughes Tool Co. representative.

Until the annual TWA stockholders meeting in Kansas City on Apr. 24, the three-man, Hughes-controlled executive committee will function in a management capacity. A new program of management, "designed to strengthen the financial status of TWA and to implement refinancing plans," is to be presented to company stockholders soon, the statement said. A basic step in the new program involves the election of a new board of directors, probably of 11 or 12 members, to replace the present board of 24. After its election, the board will name officers for the coming year.

Frye's withdrawal from all administrative duties followed Hughes' assumption of active control of the airline. Hughes had loaned TWA \$10,000,000 to help it through financial difficulties, and had obtained a majority on the board of directors by naming 13 new members.

Time Will Tell

In his statement, which was directed to employees, Frye said that "if the policies with which I disagree are unsound, it will only be a question of time until they are changed, so I urge you individually and collectively to do your best for the TWA you have helped to build."

The satisfaction of "having completed the development program which we set out to accomplish in the early days of air transportation can exist in full measure only if this great system is operated soundly and with recognition of our responsibilities to the public and to our government," he said. "This cannot be achieved without full accord between ownership and management on matters of basic

policy, and as I see no likelihood of such a situation developing I prefer to withdraw from my present responsibilities."

How the Hughes' financing plans will develop remained indefinite. Only indication so far was a Jan. 8 letter-agreement between Hughes and TWA in which Hughes Tool said it "will diligently endeavor" to obtain a \$40,000,000 loan for TWA from the Reconstruction Finance Corp., and that to obtain the loan it would place its TWA stock in a voting trust.

New TWA directors named by Hughes are: A. V. Leslie, Pittsburgh banker, serving as a working director at Kansas City; Palmer Bradley, of the law firm of Andrews, Kurth, Campbell and Bradley, of Houston, Tex., and counsel for Hughes Tool; Richard Burns, T. A. Slack and W. M. Streetman, law partners of Bradley; Harry Rogers, Houston, and W. H. Siems, New York, Hughes Tool executives; A. B. Simpson, president of National Bank of Commerce, Houston, and Oscar Holcombe, mayor of Houston; Lloyd Wright and Charles Millikan, of the Los Angeles law firm of Wright and Millikan, counsel for Hughes; George C. Summers and Francis J. O'Hara, of the Washington law firm of Summers and O'Hara, counsel for Hughes.

Airline Passenger Volume Up 20% in January Over '46

The scheduled domestic airlines carried 20% more passenger traffic in January, 1947, than in the same month a year ago, according to the Air Transport Association. The safety record continued to improve and showed up more than twice as good as the January, 1946 mark.

In spite of a drop from some of the high points in last year's record breaking performance, 10 of the 17 carriers reported sufficient gains to bring the month's total to 395,621,272 revenue passenger miles, or 66,598,422 more than in the corresponding period of 1946. There were 32 passenger fatalities a year ago, compared to 15 for the first month of this year.

Pete Willis Leaves American

R. P. "Pete" Willis, vice president of American Airlines in charge of advertising, has left the company to rejoin Ruthrauff & Ryan, advertising agency which handles American's account.

Frye Retains 287 TWA Shares

TWA President Jack Frye has sold 3,494 shares of his TWA stock since November, and now retains only 287 shares, according to SEC reports.

Rainbow Contract Ended by American; PAA Order Remains

The contract between American Airlines and Republic Aviation Corp. for 20 Rainbow transport planes, foundation of Republic's transport program, has been ended by mutual agreement.

A joint statement of the two companies said that "while recognizing the merits of the aircraft for long range service, it was agreed that present conditions did not warrant fulfillment of the Rainbow contract."

There had been rumors in the industry for some time that Republic would not go ahead with the Rainbow production program, but only a few days before the joint announcement, Republic had said that it planned to proceed with the project. Delivery date had been set for Nov. 30, 1947.

Republic still has an order from Pan American for six Rainbows and an option for 12 more, apparently contingent upon the obtaining of domestic routes.

PAA spokesmen stated that the company has no intention of canceling its orders and that PAA's contract arrangement for six Rainbows, with an option for 12 more, is unchanged by American's cancellation. The Rainbow, in PAA's opinion, is the best transport for high speed, long distance service, and it was suggested that as a result of American's action, arrangements would be made with Republic to expedite the PAA orders.

PO Asks Bigger Voice In Feederline Grants

The Post Office Dept. told the Civil Aeronautics Board last month that from now on it intends to have more to say about the establishment of feeder airlines.

In a letter to CAB, Postmaster General Robert E. Hannegan said that feeder airline problems have become the cause of "great concern" to the Post Office.

A high official told *American Aviation* that the PO is worried over the possibility that the feeder routes may run its air mail activities deeply into the red. The PO claims, he said, that some of the present and proposed feeder routes have little mail potential.

Hannegan said it was his opinion that the PO should play a more active role because of the great interest in transportation of mail by aircraft and because the expenses involved in supporting feeders is borne by the PO.

Why a letter to the board was necessary was not clear to most observers. The PO has always had the right to appear before CAB in any case, submit any evidence it wishes and take a position for or against a route.

Behncke Re-Elected ALPA Head After Stormy Session

Founder of Pilot Association Challenged for First Time

By GERARD B. DOBBEN

David L. Behncke, president and founder of the Air Line Pilots Association, survived a stormy election battle at the association's annual meeting in Chicago this week, being re-named president for a 9th term and 16th year. He was opposed by Capt. W. H. Proctor, American Airlines' senior pilot, and an Air Transport Command colonel during the war. The vote was Behncke 2,870, Proctor 1,241. Later, by motion, this vote was made unanimous for Behncke.

This marked the first time in ALPA history that there had been an active battle over the presidency, and there had even been talk of a split in the association and formation of a new pilot association.

Capt. Jerry E. Wood, of Eastern Air Lines, was elected vice president, succeeding Orvis Nelson, now president of Transocean Air Lines. Warren G. Malvick was re-elected treasurer, and Ray B. Andrews was named secretary. All terms are for two years.

Regional offices were authorized covering certain geographical areas. Through a delegation of authority, it was expected that these offices would handle many routine and less important matters which heretofore have gone to central headquarters for settlement.

Active opposition to Behncke's reelection took definite form early in January when Proctor, on the urging of fellow members, expressed a willingness to accept the nomination if it was offered to him. On Jan. 20, he wrote Behncke of his decision.

"Believing it to be fair and proper that the current President of the Association be informed of any movement in opposition to his reelection in sufficient time to enable him to protect his own personal interests, I am writing you informing you that I have agreed to accept such nomination if it is made in our next convention," the letter stated.

Proctor then obtained leave of absence from his company so that he could visit pilot councils as far as the west coast. Asserting he was opposed to the continuance of "one man rule," Proctor told these pilot groups "Our by-laws have been largely designed and written to insure absolute compliance with the president's wishes. Under them a member or chairman may not criticize him or oppose his endorsements. He cannot discuss with any so-called company personnel any phase of his relations, or write them a letter or answer one. It now appears that he cannot even write other members

about association affairs without having his communication approved by the president."

He said the scope of the association's affairs had grown beyond the capacity of one man to handle them, that wage negotiation conferences were becoming a battle between the titans, while other affairs of the association were being neglected.

"I say that until we return to the day when the employe and the employer can sit down at a table, with the support of headquarters in an advisory capacity only, we may expect only confusion, uncertainty and neglect," he told these groups.

The convention opened at the Edgewater Beach Hotel in Chicago Feb. 18 and ran until Feb. 23. Opening day was devoted to a fighting speech by Behncke in which he gave a vigorous account of his stewardship since the last convention in 1944. Both friends and opponents said he had made one of the best speeches of his career.

A resolution to limit the office of president to 10 years was tabled early in the convention. Another to open the office to election of a non-member, such as a lawyer or business executive, was defeated. The Association authorized its Organization and Education department to assist pilots of non-scheduled carriers to organize into an affiliate group in the interest of raising their standards and pay.

A resolution criticizing two aviation editors because of what were termed unfriendly articles and editorials was defeated. During the debate, some members raised the question if ALPA had made all of the facts and information readily available to them as to the viewpoint of the pilots.

Budget Bickerings Hold Vital Interests Of Aircraft Firms

Budget manipulations in Congress are receiving the closest scrutiny of the aircraft manufacturing industry which is vitally concerned over the effect reductions may have on Army-Navy procurement programs.

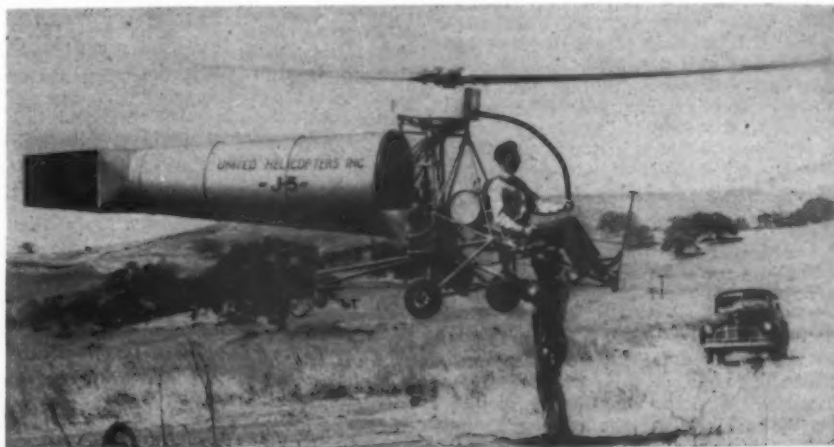
Ultimate results of reductions are still hazy. Proponents of budget cuts say the only slashes are on waste and duplications. Others see a serious threat to national security. They contend any reduction will leave the country with an impotent Navy and a wholly inadequate Army and Air Force. Middle-of-the-roadsers concede the Armed Services will have to reduce their spending, but do not believe any danger is involved.

Disturbing to the manufacturers is the statement of War Secretary Patterson that the budget cut burden will fall on the Air Forces and the services which support them. Of the War Department military budget as submitted by the President 58% is for the Air Forces, directly or indirectly.

The manufacturers are equally concerned over the comment of Navy Secretary Forrestal that budgetary cuts on Naval aviation, if carried out, would slash the research and development program, resulting in cutbacks on work involving many new projects. He said the present reserve of 4,000 planes for the Navy's 36 carriers would be wiped out in three years because of lack of modern replacements.

Helicopter Council Retains Pogue

L. Welch Pogue has been retained by the Helicopter Council of the Aircraft Industries Association to aid in working out arrangements with state and municipal authorities for helicopter operations.



Jet Torque Helicopter—This experimental model developed by Stanley Miller, Jr. of United Helicopters, Inc. uses jet thrust to counteract rotor torque and is described as having flown successfully. The unique craft with the "stove pipe" tail is not intended for immediate production, Miller said, but is a research phase in the evolution of vertical lift aircraft.

Strong G. I. Flight Program Seen Continuing to Mid-1948

**VA Reports 65,000 Total
At 2,100 Approved Schools**

By KEITH SAUNDERS

Encouraging news for the lightplane industry and hundreds of fixed-base operators was seen in a Veterans Administration statement to *American Aviation* last week that the G.I. flight training program is far from past its peak.

Enrollments as of November, latest month on which the VA has an official tabulation, totaled over 65,000 veteran-trainees, and a steady climb had been noted until the normal winter decline set in.

Current thinking of Veterans Administration officials, however, is that enrollments will again climb beginning this spring, when days begin to lengthen and the percentage of flyable days increases, and that interest in the G.I. flight training may not wane to any appreciable extent before mid-1948.

To a large and important segment of the nation's aviation industry this prediction will be heartening, for there is no question but that the G.I. program has been and still is an economic boon to manufacturers of the lightplanes used in giving the training and to the hundreds of flight schools participating in the program.

The importance of the program to the industry, particularly at this time, is indicated in VA estimates that the program will cost about \$50,000,000 if only the current trainees complete the courses in which they are now enrolled. What it may cost before it's all over is anybody's guess.

1,500 in Instrument Course

A breakdown of the enrollments as of November showed that over 47,000 of the 65,000 trainees were taking the basic flight training course leading to a private pilot rating, while approximately 12,000 were taking the advanced flight or commercial course, 3,000 were studying to qualify as flight instructors, 1,500 were taking the instrument rating course and 500 were enrolled in the multi-engine class rating course.

Some of these trainees expect to and probably will find jobs later as airline pilots or co-pilots. Many will open their own flying schools or get jobs as instructors in established schools. Others expect to operate charter freight and passenger services, sightseeing hops, crop-dusting services, et cetera. The majority, though, probably do not plan to make aviation their career but are taking the training because they think it is a skill they would like to possess.

Ninety to 95% of the trainees are gainfully employed and are taking flight training on a spare-time basis,

before or after working hours and on week-ends.

The program started Dec. 28, 1945, when the Servicemen's Readjustment Act (G.I. Bill) was amended to allow payment of up to \$500 for special courses of instruction running less than a full school year of 30 weeks.

By the end of 1946 there were over 2,100 flight schools on the approved list, with more in the process of being approved.

Improved Payments Claimed

At one time last fall VA was swamped with complaints from flight school operators because of the slowness with which their payments were coming through, or because they were not coming through at all. Some schools had been giving G.I. training for six or eight months without having received a penny of compensation, and they said they would have to close their doors if the situation were not soon remedied.

VA says this was due in large measure to failure of the operators to fill out properly and forward all the required papers, with the mushrooming growth of the program and the shortage of VA personnel as other contributory factors. It is claimed this situation has been greatly alleviated now, with payments in some regions being made on a current basis and most others being only 30 to 60 days behind in getting checks in the mail.

Despite its shortcomings, the program conveys many benefits, some tangible and some intangible. It provides employment for thousands of flight instructors, large numbers of whom are veterans themselves, and for mechanics, line boys, and other airport attendants. It provides orders for training planes, and feeds business to producers of aviation fuels and manufacturers of aircraft components and accessories.

But the benefits of the program are not all tangible and direct. Some are long-range benefits, such as giving flight training to tens of thousands of youths whose knowledge and skill will be useful in the event of a future national emergency.

The aircraft manufacturing industry will benefit, too, not only from the sale of planes in which the flight instruction is given, but also from the probability that thousands of G.I. flight trainees will become users of planes in the immediate future and purchasers of planes a few years hence.

Art Doyle Quits PAA

A. C. "Art" Doyle is resigning as of Mar. 31 as Pan American Airways' U. S. sales manager. No reason was given for the resignation and Doyle's future plans are not known. He has been with PAA about eight years.

Aviation Calendar

Mar. 1-2—Southeastern States Soaring contest, Sanford, Fla.

Mar. 3—Regional Conference, National Association of State Aviation Officials, Orlando, Fla.

Mar. 8-9—"Festival of States Air Show," Pinellas County International Airport, St. Petersburg, Fla.

Mar. 10—All Women's Aviation Banquet, Washington Chapter 99's, WASP's, Women Flyers of America, Mayflower Hotel.

Mar. 12-15—Transcontinental women's air races, Van Nuys, Calif., to Tampa, Fla.

Mar. 15-16—All-Woman Air Show, Tampa, sponsored by Florida chapter of Ninety-Nines.

Mar. 17-19—Air Transport Association Engineering and Maintenance Conference, Hotel Statler, St. Louis, Mo.

Mar. 19-20—Regional aviation clinic sponsored by CAA and state aeronautics commissions, Congress Hotel, Chicago.

Mar. 26—CAA-Florida statewide aviation conference, Daytona Beach, Fla.

Mar. 27-29—Third annual Philadelphia forum, American Helicopter Society.

Apr. 9-11—SAE Aeronautics meeting, Hotel New Yorker, New York.

Apr. 16-22—Third International Air Service Exhibition (Aerofair) Houtrust Halls, The Hague, Netherlands.

Apr. 16-18—SAE Transportation Meeting, Hotel Stevens, Chicago.

May 1-2—SAE Personal Aircraft Meeting, Lassen Hotel, Wichita, Kans.

May 5-10—International Travel Exposition, Grand Central Palace, New York.

May 6—PICAO Assembly Meeting, Montreal.

May 9-18—"St. Louis Air Fair of 1947" regional aircraft show, St. Louis arena, sponsored by Aviation Council of Metropolitan St. Louis.

May 11-15—American Association of Airport Executives annual convention, Sherman Hotel, Chicago. (Airport exposition and exhibit trade show to be held in conjunction.)

May 26-27—Institute of the Aeronautical Sciences light aircraft meeting, Detroit.

May 26-29—American Society of Mechanical Engineers, aviation meeting, Los Angeles.

May 30-31—Philadelphia Air Races, Northeast Airport, Philadelphia.

June 1-5—Aviation Writers Association annual convention, Los Angeles.

June 1-6—SAE Summer Meeting, French Lick Springs Hotel, French Lick, Ind.

June 4-6—Aero Medical Association, 18th Annual Meeting, Hotel Ritz-Carlton, Atlantic City.

June 7-8—13th Annual National Air Carnival, Birmingham, Ala., sponsored by Birmingham Aero Club.

July 3-6—International Air Races, Long Beach, Calif., Chamber of Commerce sponsor.

Aug. 21-22—SAE West Coast Transportation & Maintenance Meeting, Biltmore Hotel, Los Angeles.

Oct. 2-4—SAE Autumn Aeronautics Meeting, Biltmore Hotel, Los Angeles.

Nov. 4-7—National Airport Show and Institute, Municipal Auditorium, Cleveland. Sponsored by Air Foundation and National Aeronautic Association.

Nov. 6-7—SAE Fuels & Lubricants Meeting, Hotel Mayo, Tulsa, Okla.

Dec. 1-3—SAE Air Transport Meeting, Hotel Continental, Kansas City, Mo.

More Funds for Air Safety Urged by House Committee

Group Recommends 4-Point Landing, Airways Aid Plan

Congressional committees investigating the multiple problems attendant upon air safety have indicated a sympathetic attitude toward solution and given strong indications that development and application of all safety devices will be speeded.

An interim report by the House Interstate and Foreign Commerce committee urged Congress to provide additional funds for aircraft safety and asserted that differences between airline operators and government agencies have been responsible for delaying utilization of war-time safety developments.

The committee said there had been a tendency to wait too long before adopting currently proven devices as standard in the hope that better ones would be developed. This, the committee added, can no longer be tolerated. The committee indirectly criticized Congress for making inadequate appropriations for research and outlined a four-point landing and navigational aid program which should be made "fully available as soon as possible."

The program recommended included: (1) high intensity approach and runway lights, fog dispersal systems and multiple runways; (2) instrument landing systems, radar devices for talking planes down, and radar to keep airborne planes under surveillance to guard against crashes; (3) very high frequency ranges (beams) and communications and all-directional ranges which can be used by electronic distance measuring equipment; (4) air traffic control, coupling the use of the present communications system of radio telegraph, telephone and ground lines, and the additional use of surveillance radar.

The Senate Commerce committee recommended installation of bad weather landing aids for about 160 major airports and also authorized its aviation sub-committee to inquire into the financial situation of U. S. airlines.

ATA Opposes Traffic Flow Control

The hearings during the past fortnight, especially on the House side, concerned the more technical phases of problems of all weather flying although special emphasis also was given to the need for reducing the load now carried by the pilots, both in the way of cockpit instrumentation as well as the complexity of the rules and regulations of flight.

Milton W. Arnold, vice president-operations and engineering of the Air Transport Association, took a firm stand against giving the CAA authority to regulate rigidly the flow of

Price of Safety

About 24% of modern airliner's payload potential is consumed by built-in safety features, W. K. Ebel, engineering vice president of Glenn L. Martin Co., told the House Interstate and Foreign Commerce Committee last week. He declared that whatever navigational and blind landing aids are adopted, "they should be developed with the thought of taking weight out of the air and placing it on the ground... If this is not done, we may find ourselves manufacturing flying electronic laboratories with little room left for passengers or cargo."

air traffic into control areas. Under such regulation, the scheduled airlines would bear the brunt of curtailment of service, Arnold said. The reason, he stated, was that under instrument flying conditions, CAA would necessarily have to allocate the number of flights of Army, Navy, and non-scheduled aircraft into a particular airport on the basis of estimates, while certificated carriers, operating on schedules, would face a fixed reduction in flights.

Arnold told the committee that the airlines are beginning to feel they are over regulated. He dwelt at length on procedures which a pilot must follow in declaring an emergency which permits him certain latitudes in landing procedures.

Pilots, he said, are reluctant to declare an emergency because of the penalties of a fine, suspension or revocation of their licenses if CAA air carrier inspectors fail to sustain their judgment.

19 Systems Faulty

While CAA had told the Senate committee that 32 Instrument Landing Systems were "absolutely complete," Arnold pointed out that on a survey flight conducted by Capt. W. E. Rhoades, head of the ATA Air Navigation Traffic Control unit, it was found that the airlines, with present facilities, were presently able to use relatively few of them. No fault was found with the system at Indianapolis. But various difficulties were encountered at some of the other 19 tested. Newark airport was listed as the worst.

He also stated that most of the Army and Navy GCA installations were of no present help to the airlines for emergency landings because radio equipment in the planes, due to differences in frequencies, did not permit the necessary two way conversations between pilot and landing personnel.

The airlines he said were modifying this equipment as rapidly as possible but difficulty has been experienced in getting the necessary parts.

Arnold emphasized the need for cutting down cockpit procedures for the pilot. Exhibiting a bulky bundle which represented the printed rules and regulations with which the pilot must be familiar, he pointed out that the accident record of scheduled Canadian airlines, where weather conditions generally are worse than in the U. S., was five to six times better than in this country. He said operations, equipment and service were generally comparable but Canadian pilots operated under simpler rules and could make official weather reports from the cockpit.

Pilot promotion procedures, under a seniority system, were discussed by Jerome Lederer, assistant manager and chief engineer of the Aero Insurance Underwriters, who said his group felt management should be permitted to exercise greater control over promotion of pilots than is permitted under the present seniority system.

Stating that all the airlines suffer when one particular airline has a bad safety record, Lederer urged group action in raising the pilot training standards of the industry as a whole, especially in safety measures and emergency procedures. Likewise he urged joint action in making studies which would enable the airlines to set up certain tests designed to eliminate, before hiring, the pilot who is emotionally unsuited for airline flying.

First Regional Air Show Slated for St. Louis in May

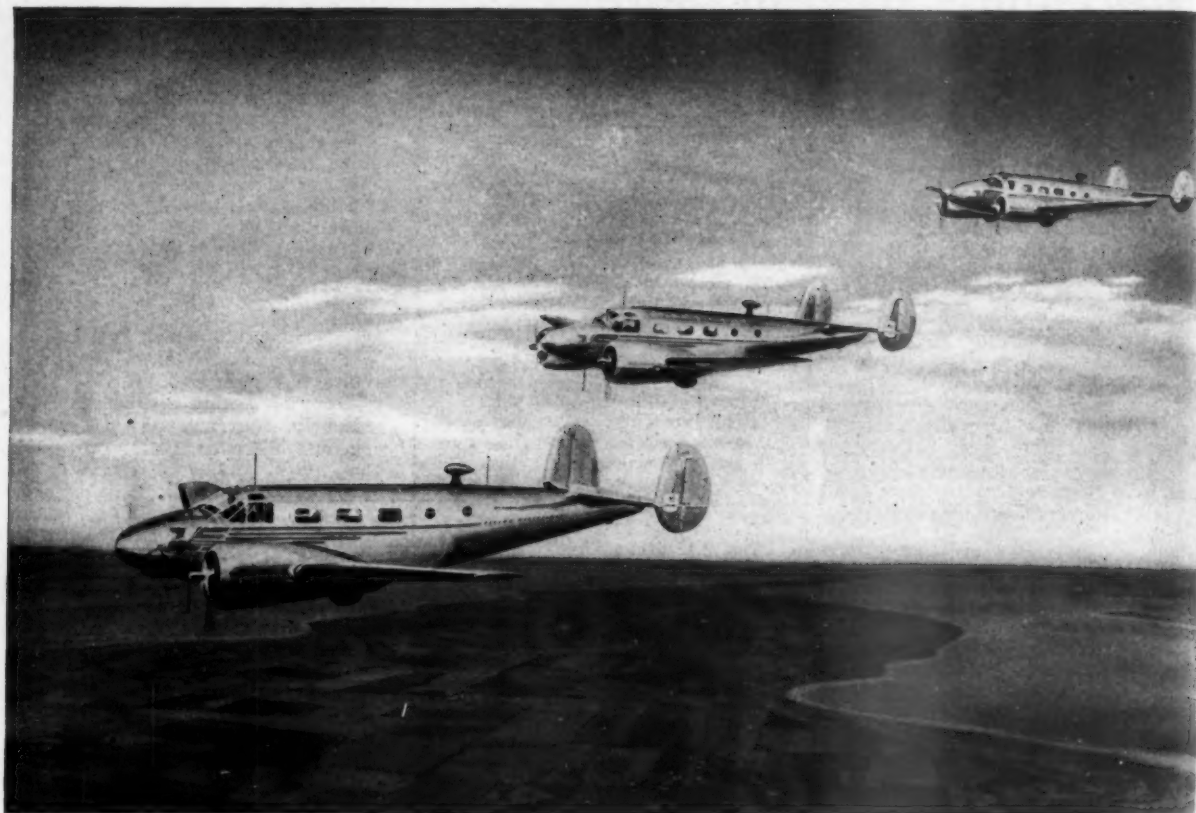
The first regional aircraft show sanctioned by the Aeronautical Show Council will be held in St. Louis, May 9-18 inclusive, under sponsorship of the Aviation Council of Metropolitan St. Louis. Local business leaders have subscribed over \$70,000 as a guarantor's fund for production of the "St. Louis Air Fair of 1947" at the centrally located St. Louis Arena.

J. Gates Williams, St. Louis financier, is general chairman of the event, while Col. Tod Bates, new director of the Aircraft Industries Association's National Aircraft Shows, has been obtained as executive director of the fair, on loan from his AIA position.

A 10-state area will be covered in the regional exposition.

Sullivan Leaves Post Office

Gael Sullivan has resigned as Second Assistant Postmaster General to become executive director of the Democratic National Committee. John J. Gillen, who has been deputy second assistant in charge of international postal service, is serving as acting second assistant, and it is unlikely that a permanent second assistant will be named immediately. Sullivan has been credited with doing an outstanding job on air mail.



Twenty-seven Hundred Flying Horses

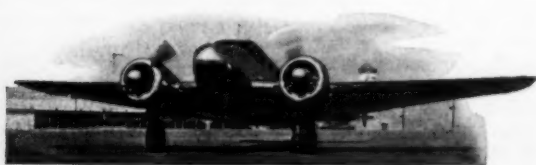
SOCONY Vacuum Oil Company bought the first Beechcraft to come off the production line more than thirteen years ago. They have been flying Beechcrafts ever since. The latest purchase is this fleet of three Beechcraft Executive Transports, now flying regularly—here and overseas—enabling executives and technicians of Socony Vacuum and its affiliates to count their travel time in hours instead of days and weeks.

Powered with two 450-horsepower engines, fully equipped for day or night flight, luxuriously furnished and appointed, the 200-mile-an-hour Beechcraft Executive Transport enables up to nine people to serve their companies and their customers with a speed and a cross-country mobility never possible before.

The Model 18 Executive Transport is an outstanding example of modern business joining hands with modern science

to get its work done faster, better, and at lower cost. Food companies, machinery manufacturers, chain stores, oil companies—these represent only a few of the fields of business in which the Beechcraft Model 18 is at work. It is saving hours and days of travel time previously wasted. It is joining the outposts of business with its control centers. It is increasing the capacity of employees of all grades to get their jobs done. There may be similar tasks which it can perform for your company. It's worth finding out about.

Your nearest Beechcraft distributor is prepared with facts and figures to help you appraise company-owned air transportation in the light of your own transportation needs. He welcomes the opportunity to demonstrate to you the new Beechcraft Model 18. No obligation, of course. Beechcraft distributors are located in key cities across the U.S.A.



Beech Aircraft

CORPORATION



WICHITA, KANSAS, U. S. A.

CAB Checks Fares and Rates For Financial Aid to Airlines

Investigating Possibilities For More Non-Mail Revenue

Increased passenger fares rather than higher mail pay rates may be one way out of current airline financial difficulties, the Civil Aeronautics Board believes. It has begun an investigation of existing rates, fares and charges for both passengers and cargo moving over domestic certificated airlines to find out whether increased revenues can be produced by higher fares and rates.

The order opening the general investigation said: "The prevailing general levels of passenger and property rates, fares and charges for interstate air transportation . . . within the continental limits of the United States, excluding Alaska, may be unjust or unreasonable and . . . adjustment of such general levels designed to accomplish an overall increase in non-mail revenues of . . . air carriers may be required." The investigation will seek to learn, the Board added, whether CAB "should determine and prescribe" general fare levels intended to boost passenger and cargo revenue for the airlines.

One CAB official emphasized that by calling this investigation, the Board was definitely not pre-judging current fare levels. He pointed out that it might well transpire that any hike in fares could do more harm than good. This official insisted that the Board was determined to try every way out of the present financial maze and that the fare study represented a search for one way of helping airline incomes.

But there was no mistaking the fact that the order came at a time when nearly half the country's airlines were clamoring for more mail pay. Or the fact that CAB spoke plainly in its order of increasing "non-mail" revenues. Observers reasoned that these were hardly coincidental, and suggested that CAB was looking for a way out other than by raising mail rates.

Mail Pleas Pile Up

Meanwhile, pleas for higher mail pay rates kept piling up on CAB's doorstep. Paul Collins, president of Northeast Airlines, testified in a rate hearing for his company that NEA must have \$1,121,000 between Jan. 1 and April 30, 1947, in order to stay in business. Collins insisted that higher mail pay was the only way out of NEA's predicament.

Collins said last year, merger with PCA seemed the best way to strengthen Northeast. Now, he admitted, the merger for all practical purposes is dead, largely because of

the serious financial condition of both airlines.

Turning to his own line, Collins told a CAB examiner that on Jan. 1, Northeast had current liabilities then due and payable of \$1,115,530.08. At the same time, the company had cash available to pay off these liabilities of only \$102,747.70—only 9c of assets for each \$1.00 of liabilities. On Feb. 1, Collins said, Northeast's cash deficiency amounted to \$1,200,000. The airline's creditors, he said, "will simply not sit back and see that deficiency increase."

Chicago and Southern's prospects seemed to have taken a turn for the better as CAB granted company officials the private conference for which they asked late in January. The full Board plus members of its staff met with Carleton Putnam, C&S president, Richard S. Maurer, general counsel for the airline, and other C&S officials. Neither side was willing to say what was discussed, but there can be no doubt that C&S' serious financial position was presented to the Board in some detail.

One result of the conference became known immediately, as a scheduled hearing on a Caribbean mail rate for C&S was indefinitely postponed by agreement between the airline and CAB public counsel.

C&S Revises Estimates

A few days later, C&S submitted to the Board a set of revised estimates of the amount of mail pay it believes it will need to begin service along all its Caribbean routes. While there is no visible connection between the private conference and the revised mail pay estimates, there seems to be every reason to believe that C&S new—and lower—figures are related to suggestions made by the Board at the meeting.

C&S reduced its rate request for the New Orleans-Havana route to \$1.77 per airplane mile. It has previously been asking \$2.17 per mile. Likewise, the company now believes it can operate the New Orleans-Havana-San Juan segment for \$1.47 per airplane mile instead of the \$1.64 it originally called for. To operate its entire Caribbean system, C&S originally estimated that it required mail pay support at \$2.02 per mile; its amended petition stated that \$1.90 per mile now seems an adequate break-even figure. Insiders believe CAB will move promptly in giving C&S some additional financial assistance.

Western Air Lines re-entered the mail rate picture by amending a mail rate petition originally filed in April, 1944. Western asked the Board for a temporary 25c per airplane mile for operations on all its routes, and indi-

cated that rapid action on the temporary rate was required. The amended petition asks to have any temporary rate made retroactive to May 1, 1944.

Feeder Pay Boosted

The feederlines had concrete evidence that CAB was willing to go at least part of the way toward meeting their mail pay needs. In the case of Monarch Air Lines, Inc., local operator centered in Colorado and surrounding states, the Board issued a final order allowing the airline to begin drawing mail payments at a temporary rate of 35c per mile. This rate represented a 10c increase over the 25c figure which had previously been accepted as the maximum CAB planned to allow the local airlines.

Some indication that the Board meant to raise mail support for the feederline carriers was seen earlier in a show cause order suggesting 35c as the rate for Pioneer Air Lines. The Board's action in the Monarch case establishes the policy firmly. Many feederline men, however, are still wondering just how far 35c will go toward meeting the heavy outlays necessary to get a local airline enterprise on its feet.

Landis Favors Merger Of Weaker Airlines

Working out of "adequate consolidations" of certain airlines, "particularly the weaker ones," is one of the important things in the present airline financial picture, James M. Landis, chairman of the Civil Aeronautics Board, said in a radio interview on Feb. 13.

Landis also looked with favor upon the airlines, "in a few instances," obtaining government loans from the Reconstruction Finance Corp.

Discussing consolidations, he said that "very often, just like in algebra, a minus and a minus becomes a plus. Two weak carriers put together may make a strong one."

Under the law, CAB must grant mail pay permitting an airline to break even and make a little profit, depending on honest, economical and efficient management, he said, warning, however, that the board is not going to pay for inefficiencies under any circumstances.

Questioned regarding possible curtailment of equipment purchases due to the financial condition of certain airlines, Landis said: "I think we must recognize that it is wise financial policy to finance reasonable and good equipment programs of airlines. If private financing is not available, there is always the possibility of a certain amount of government financing. After World War I, our railroads were in poor shape. Our government put millions of dollars in the railroads and that was a wise investment; it paid back. In a few instances it might be wise to use an institution like RFC for a government loan here and there to meet an equipment need of a carrier."

Basic Issue of Profits, Competition in Air Cargo Confronts CAB in Knotty Freight Forwarder Case

By DANIEL S. WENTZ, II

The air Freight Forwarder Case—a Civil Aeronautics Board proceeding which will be heard in four consecutive sessions in New York, Washington, Chicago and San Francisco—is now in progress, in the Great Hall of the Chamber of Commerce of the State of New York.

In its opening phases, the proceeding has been a general investigation of the Railway Express Agency. Applicants who want CAB authorization to act as air freight forwarders will be heard later on. In the first week's session, CAB Examiner J. Earl Cox heard REA officials, supported by a long list of shipper witnesses—representatives of firms who use REA's services—explain just how the Agency works and how it fits into the air transport picture.

The basic issue being fought out in the case is one of profits and competition in air cargo. Prior to the war, REA had the air express field almost entirely to itself. Working under contracts with scheduled airlines, it provided practically the only such service then existing. After the war the picture changed rapidly as cheap surplus planes were thrown into cargo operations by entirely new companies operating as contract, or in some instances, common carriers.

A number of scheduled airlines have also gone into the freight business themselves, competing with the non-certificated freight lines and undercutting substantially the rates at which air express moves.

Railway Express believes—and hopes to prove in the Freight Forwarder proceeding—that it, too, should be authorized on equal terms to do business as an indirect air carrier, handling shipments of all sizes and descriptions on the ground but using the airlines and other forms of transport to do the actual carrying job. REA officials declare emphatically that they have no desire whatever to go into the business of flying airplanes; they believe their most useful function is to act as a ground agency, picking up and delivering shipments, and co-ordinating freight movements by air, truck or rail.

REA Blames Airlines

Until recently, neither the airlines nor the REA with whom they have air express contracts was willing to give any concrete opinion on how the relationship was working out. There were plenty of rumors that it wasn't too satisfactory, and hints that because REA is owned by the railroads it was being used to hold back air freight development. Now REA has gone on record in this case accusing the airlines of retarding the development of air freight by declining to agree to rate reductions proposed by REA. (The contracts give the airlines final say on what rates REA may charge for air express shipments.)

REA claims that some airlines would like to keep express rates high in order to shunt the bulk of the air cargo business to their own air freight divisions.

REA officials say that more than one airline carries REA air express shipments at a relatively high rate on the same plane which is carrying air freight at low bulk rates offered by the airline's individual air freight tariff. They are convinced that a 50% cut in air express rates would boost the business some 300% in a short space of time.

This claim, of course, will be fought by a number of the airlines, and also by the Air Transport Association. Whatever the outcome, the whole REA-airline picture should become a whole lot clearer as a result.

Freight forwarders, as REA v. p. Kinsey N. Merritt pointed out, are quite different from REA. The forwarder, strictly speaking, is chiefly a consolidator, a middle man who accepts individual shipments from any source and lumps them into one large shipment which he then offers to a carrier. Because the rates for the bulk shipment are lower than the total cost of shipping each of the smaller packages individually, the forwarder's profit exists in the spread between individual and bulk rates. REA by contrast, does not consolidate small shipments into large ones; it ships each package or crate as it is received. Freight forwarders in the surface field frequently use REA's facilities, and the Agency's officials emphasize that they do not want to compete with the forwarder's function.

Newcomer to Air Transport

The forwarder is a comparative newcomer in air transportation, although many exist in the motor freight and rail fields.

With the rise of independent air freight lines after the war, forwarders sprang into existence. Their usefulness to the air freight lines lies in the fact that they serve in lieu of a costly ground organization for developing and originating cargo business.

Because very little is known about the usefulness of the forwarder in air transportation, CAB is starting from scratch to explore the whole problem. In that sense, the present case is just as much an investigation as it is a trial of individual applications.

The whole picture is loaded with serious and complicated questions. Should forwarders, for example, be given certificates of convenience and necessity like direct air carriers, or should they be allowed to operate under exemptions? If certificates are decided upon, how many should be issued and who should get them?

The Board will also have to decide just what regulatory safeguards to place on any certificates or permits it may give to forwarders. For example, forwarding in the surface transportation field has in the past bred a number of abuses such as discrimination, undue preference, and similar practices considered unfair competition. If air forwarders are to be allowed, CAB must find ways to prevent such discriminatory actions before they get a start.



New Capital Bird—Pennsylvania-Central Airlines, which observes its 20th anniversary on April 26, has adopted a new official insignia, replacing its "flying bullet." C. Bedell Monroe, PCA president, and Karl Brocken (right), industrial designer who created the new emblem, discuss a drawing of the new "Capital Bird" which will be placed on the airline's new Martin 2-0-2's and Douglas DC-6's, as well as used in advertising and promotion.

Transport Notes

PCA Cargo Planes: Pennsylvania-Central plans to put into service soon the first of a fleet of four-engined Douglas cargo planes due to increased air freight volumes flown in recent months. The new craft are being converted by The Glenn L. Martin Co. to PCA's specifications and incorporate special installations. They will be placed in operation on the regularly-scheduled air freight flights between New York and Chicago-Milwaukee, with intermediate stops and connections.

C & S Safety: Chicago & Southern Air Lines has operated continuously for over 10 years without death or injury to a passenger. During that time it has flown 31,017,444 scheduled miles and carried 974,880 passengers. C & S' last fatal accident occurred at St. Louis in August 1936.

AA Ticket Office: American Airlines has opened a new ticket office in Springfield, Mass., to serve the western part of that state.

Motion Sickness Aid: Dr. Emerson Day, TWA medical director, has announced that a war-developed "motion" sickness remedy will be available to passengers aboard TWA Constellation and Skymaster equipment. The compound, employing hyoscine hydrobromide in a candy-coated chewing gum form. Dr. Day said it was being made available to that less than 1% of travelers who become airsick to any degree.

AA Training Program: American Airlines has launched a job training program for its management personnel, the first step being taken by the reservations and ticket offices division of the sales department in a series of three-day meetings held throughout the system.

C & S Agency: Chicago & Southern Air Lines has designated Burton Browne Advertising, of Chicago, and a Cuban affiliate, Publicidad Alvarez Peres, to handle a new international advertising and public relations program.

UAL Stewardesses: United Air Lines plans to employ and train some 400 new stewardesses by the end of June to augment present staff of 550.

AA Bottle Cooler: American Airlines, as a special service to passengers traveling with babies, has introduced a portable icebox—the Flagship Baby Bottle Cooler—for storing nursing bottles during flight. The cooler is available at American Airlines airport ticket counters and consists of two cardboard boxes and a plastic bag filled with dry ice.

SAS Offices Moved: The Scandinavian Airlines System has moved its air cargo, public relations and advertising offices, and the office of Theodore P. Gould, V.P. in charge of traffic and sales in North America, to 630 Fifth Ave., New York. Executive offices will continue at 270 Park Avenue.

Pacific Contract: Contract operations conducted by United Air Lines in the Pacific for the Army Air Transport Command since the fall of 1942 were concluded in January, after UAL crews had made the equivalent of 7,000 trans-Pacific flights logged more than 50,000,000 miles, transported 156,000 passengers, and carried over 8,600 tons of cargo and 9,200 tons of mail. Nearly 42,500 miles daily were flown at the height of operations.

Eight Out of 2,474,700

U. S. scheduled airlines in foreign and domestic operations last year made a record total of 2,474,700 take-offs and landings with only eight resulting in passenger fatalities, Robert Ramspeck, executive vice president of the Air Transport Association recently told the House Interstate and Foreign Commerce Committee investigating air safety.

UAL Petition Refused In Overtime Pay Suit

An airline is subject to provisions of the Fair Labor Standards Act, instead of the Railway Labor Act, in all operations not directly connected with the transportation of passengers, mail or freight, under a ruling made in Chicago by Federal Judge Philip L. Sullivan.

Sullivan refused a petition by United Air Lines requesting dismissal of a suit claiming \$400,000 in back overtime pay filed by four employees at the modification center the airline operated for the Army during the war at Cheyenne, Wyo. He ruled that all other employees at the center who claim back overtime pay should attach their claims to the original suit.

The four employees had claimed United owed them time-and-one-half overtime from September, 1942, to December, 1945, under the Fair Labor Standards Act which provides for a 40-hour week. The Railway Labor Act, under which all common carriers in interstate commerce operate, has no work week provision.

Court to Review CAB Decision Despite Presidential Approval

In a preliminary opinion on Waterman Steamship Corp.'s appeal of the Latin American decision, the United States Circuit Court of Appeals for the Fifth Circuit (New Orleans) has decided that it does possess the power to review decisions of the Civil Aeronautics Board even though they have been approved by the President.

Previously, lawyers have tended to the theory that such Presidentially-approved decisions were non-reviewable. Several years ago, the Second Circuit Court, in the so-called American Export Case, ruled that it had no power to review such a decision.

The New Orleans opinion, which, however, is only a preliminary to further proceedings, disagrees with the Second Circuit's findings. The opinion by Judge Samuel S. Sibley says that a plain reading of Section 1006 of the Civil Aeronautics Act (dealing with judicial review) allows courts to review CAB orders with the single exception of permits issued to foreign air carriers. Judge Sibley's reasoning holds that the Court is actually proposing to review only an order of the Board itself, and not the approval or disapproval of the President.

Agreement Lacking On ATA Tax Program

Lack of unanimity of opinion among the airlines over the need for Federal legislation to avoid multiple taxation in the air transportation industry is causing the Government Affairs Committee of the Air Transport Association to reconsider its proposed legislative program.

Opposition to the Bulwinkle bill, H. R. 1241, whose general principles had the endorsement of most of the airlines last year, has been led by J. J. Ardito, director of taxes, TWA. Ardito is understood to have picked up strong support from the management of both Eastern and Northeast airlines.

The Bulwinkle bill attempts to write a formula which would set up a basis for state taxation of airline property in relation to the business done by the airline within the state and on the basis of real estate holdings within the state. The formula would include aircraft, moveable equipment, net income and gross receipts. It is designed to prevent a recurrence of the Northwest Airlines case wherein the state of Minnesota levied a tax on the basis that 100% of the airlines property was in Minnesota, although much of its flight and other moveable equipment was in other states. The U. S. Supreme Court upheld Minnesota in this taxation theory because of the lack of Federal legislation to the contrary.

Ardito contends that each airline can better protect its own interests as far as state taxation is concerned on an individual basis rather than through Federal legislation.

Air Cargo, Inc. Adds to Staff, Starts Planning

Air Cargo, Inc. is hiring personnel and completing its organization in preparation for its job of arranging ground transportation of cargo and handling it at airports for the scheduled airlines.

Jervis Langdon, who resigned recently as Pennsylvania-Central Airlines' general traffic manager, and who was formerly assistant vice president of the Chesapeake and Ohio railroad, has joined Air Cargo, Inc.'s staff. Robert Guest, statistician for the Air Transport Command, has also been hired. Other announcements are expected soon.

Fred M. Glass, who was recently elected president of Air Cargo, Inc., has temporary offices at Air Transport Association headquarters in Washington. He is seeking separate office space in the city.

When organizational matters are completed, Air Cargo will proceed with its program of making extensive contracts with truckers for the ground transportation of cargo. Somewhat later, the establishment of air freight terminals at airports will be started.

See your

WAA Distributor

Need a tire—compass—engine parts perhaps? One of the many WAA Approved Distributors can probably supply your requirements *right out of stock!* How? Because all distributors selling government-owned surplus aircraft components now have large inventories at your disposal. Prices are right too—far below the original cost.

Why not fill out the coupon and have this list of Approved Distributors handy? There is no cost or obligation on your part—just send in the coupon. If it is more convenient, the WAA Aircraft Components Sales Centers are at your service.

VETERANS OF WORLD WAR II are invited to obtain certification at the nearest WAA Certification Office serving their area and to submit orders to War Assets Administration or its agents. Quantities of all merchandise are reserved to fulfill the needs of priority claimants.

WAR ASSETS ADMINISTRATION

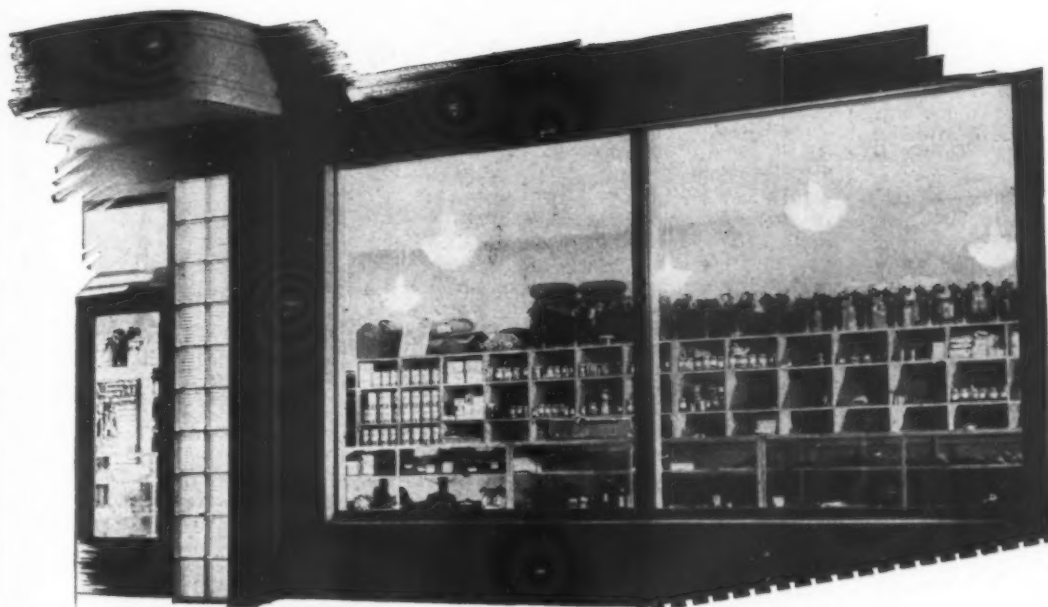
National Aircraft Components Sales
Center, 6200 Riverside Drive (Municipal Airport) Cleveland 32, Ohio.

Western Aircraft Components Sales
Center, 190th Street & Normandie
Ave. (Alcoa Plant) Torrance, Calif.

Office of
425 Second Street N. W., Washington 25, D. C.

Aircraft Disposal

SET TO SERVE



The WAA Distributor's establishment pictured here is typical of the modern, well-equipped plants now ready to serve you.

War Assets Administration—
a government agency
for the disposal of surplus property.

War Assets Administration
Office of Aircraft Disposal
425 Second St., N. W., Washington 25, D. C.
Please send me the list of Authorized WAA agents.

Name

Street

City

State



Sea-Air Committee Ad Strikes at C&S, Asks Board for Air Routes

The Sea-Air Committee plugged hard last month for a New Orleans-Havana-San Juan "unsubsidized" air route for Waterman Steamship Corp.; accused Chicago & Southern Air Lines of getting the route by first claiming it didn't need mail pay and later asking a big figure, and heard C&S President Carleton Putnam assert that the only way Waterman could fly the route would be to subsidize itself out of profits of its "already subsidized steamship company."

The committee, financed by steamship companies, took full-page newspaper ads, headed "High (and Expensive) Journey" (title of Putnam's recent book was "High Journey") to ask the Civil Aeronautics Board either to grant Waterman the route or to seek clarifying legislation if it had doubts about the rights of steamship companies to operate air service.

It claimed that C&S requires \$2,-032,284 annual government aid to fly New Orleans-San Juan (route is not yet open beyond Havana), although before getting a certificate the airline had said it would profit without aid. Waterman, it added, would fly without aid. C&S's requested \$2.17 per mile mail pay for New Orleans-Havana would, based on November and December figures, equal \$877.86 per ton-mile, compared with 75c now paid on Atlantic routes and 45c on some domestic routes, the committee said. C&S has now reduced the \$2.17 estimate to \$1.77.

In a wire to CAB, Putnam branded the ad as probably "the first instance on record of a pressure group attempting to influence the Board's decision in a case pending before it by paid newspaper advertising."

"It provides the sharpest insult ever directed at a federal administrative agency and undoubtedly constitutes contempt of the board's judicial functions."

Since 1928, subsidies to steamship companies probably exceed 400 millions, Putnam said, adding that "in one specific instance, Waterman received \$2,400,000 for carrying 900 pieces of mail, or \$2,666 a letter."

In a letter to the *Chicago Daily News*, Putnam said if Waterman proposes to fly without subsidy, it either doesn't know what its costs will be, it will get the route on a no-subsidy promise and then come back for mail pay, or it will subsidize itself out of the profit of its "already subsidized" steamship company until air transportation becomes completely self-supporting.

UAL to Inaugurate New S.F.-Honolulu Service May 1

United Air Lines hopes to inaugurate passenger, mail and cargo service between San Francisco and Honolulu May 1.

PCA Drops ATC Contract For U. S.-Germany Route

Pennsylvania-Central Airlines has cancelled its contract with the Army Air Transport Command whereby the airline would have operated a route for ATC between Washington, D. C., and Frankfurt, Germany.

Continued difficulties in obtaining parts and supplies needed for maintenance of the government aircraft to be used were given by J. H. Carmichael, PCA executive vice president, as reasons for the cancellation effective Feb. 28.

Under the contract, the Army assumed full responsibility for supply, Carmichael said, and subsequently was unable to provide the necessary parts. He stated that PCA originally had expected to fly the route but never had entered that phase of the operation but had performed maintenance on planes assigned by ATC to the Washington-Frankfurt run.

Northwest Planning \$793 New York-Shanghai Fare

Passenger fares between New York and Shanghai will be \$793 on Northwest Airlines' new Orient route, according to a statement attributed to Croil Hunter, NWA president, in a press dispatch from Shanghai last week. Hunter, a group of company and government officials, and special guests had left the Twin Cities Feb. 10 on a survey flight over NWA's route to Tokyo, Shanghai and Manila, via Alaska and the Aleutians.

The NWA president indicated that the Orient service is slated to start about May 1, with flying time of 33 hours from New York to Shanghai. He stated that the planned one-way fare of \$793 is "highly competitive" in view of the \$920 charged by other airlines San Francisco-Shanghai.

Venezuela Forces Pan Am to Reinstate Higher Fares

Because of Venezuelan government objections to lower fares established recently, Pan American Airways has reinstated higher fares on schedules into that country, according to a PAA spokesman.

The Miami-Caracas fare had been reduced from \$145 to \$130; Caracas-Curacao, \$30 to \$20; Barranquilla-Caracas, \$62 to \$52 and Port of Spain-Caracas, \$45 to \$39.

Two New Directors for AA

Charles S. Cheston of Philadelphia, who was assistant director of the Office of Strategic Services during the war, and Thomas M. Conroy of Cincinnati have been elected directors of American Airlines. They replace Chandler Hovey of Boston and Charles Rheinstrom of New York who resigned recently.

Cheston is a director of J. P. Morgan & Co. and Conroy is executive v.p. and a director of the Central Trust Co. of Cincinnati.

Airline Personnel

Administrative

G. R. Thornton, district manager for TWA in San Francisco for the last two years, has been appointed Paris manager. Frank S. Donant, district sales manager, is acting district manager in S. F.

Robert M. McCraith, former director of personnel relations for Air Transport Association, is now manager of labor relations department for National Airlines.

Jose Cabral, one of Portugal's leading airmen, has been appointed TWA district manager for Portugal. This is the first time a TWA employee other than a U. S. citizen has been named district manager at an overseas station, according to the company. Cabral, who has been d.t.m. at Lisbon since last May, received his pilot's license with the British Royal Air Force in 1919.

Pollard Garrison has assumed duties of TWA coordinator with CAA, replacing Ray Laux, recently recalled to active Army duty.

Traffic and Sales

Dean J. Hanscom, director of traffic for the International Division of TWA, has resigned to join Northwest Airlines in connection with establishment of its new route to the Orient.



Gallo

Gash

Charles L. Gallo, formerly general manager for TACA Airways in Central America, has been named director of traffic for TWA's International Division, succeeding Hanscom. Gallo was with TWA for more than 10 years before going to TACA and has been on leave of absence from TWA while with that company.

Ward Gash, formerly with United Air Lines, has been appointed d.t.m. of Continental Air Lines in Denver.



Morgan

Farrell

Lt. Col. Robert J. Morgan, who directed movement of supplies for the Air Forces in the Pacific during the war, returned to the Orient early last month as d.t.m. for Northwest Airlines at Tokyo.

James P. Farrell has been named d.t.m. for Northwest Airlines at New York. He was transferred from Chicago. Farrell started in aviation with Eastern Air Lines 13 years ago.

John Bailey, 11-year TWA veteran, has been appointed passenger sales manager for company's International Division, with headquarters in Paris.

Airline Commentary

By ERIC BRAMLEY

ONE OF OUR wisecracking airline friends said the other day: "There are more rumors flying in this business than there are airplanes" . . . the man has a point there . . .

Delta Air Lines gets an orchid this month for a swell direct-mail advertising piece . . . This little folder has some sand glued to it, and the theme is that only yesterday this sand was a part of Miami Beach, and although Delta can't bring the beach to you, it can take you to the beach in less than six hours from up Chicago way . . . Burke Dowling Adams advertising agency gets credit for the idea, and Delta gets credit for a remarkable low-cost production job that should interest other airlines in these days of rising costs . . . The airline had a bid of \$400 from a printer for printing and sanding 10,000 copies . . . So Delta did the job in its own shops for \$150, including labor and overhead . . . It's an advertising piece you have to stop and read, and it was produced at minimum cost . . . Other airlines should note . . .

George Kane, of TWA's news bureau, reports this one . . . Four prospective TWA hostesses and a veteran TWA pilot were riding as non-revenue passengers on a flight into Wichita . . . It was night, and snow was falling . . . The gals became somewhat concerned about this night instrument approach, and consulted the pilot-passenger . . . He said that the captain in charge was doing a fine job . . . Pointing out the window, he said: "See that red light blinking out there? Well, the pilot has brought the plane right through the clouds to exactly where it should be" . . . Then, pointing out the opposite window, he said, "See that blinking green light? Well, the pilot was supposed to come down right between them, and he did. That's perfect flying" . . . Of course the pilot neglected to tell the girls that the lights were on the plane's wing tips, but he reassured them, anyway . . . Maybe this system is the answer to all-weather flying . . . We hope these hostesses were wised up during their training . . .

Good-old-dependable railroads roundup: A train that was running five hours late because of bad weather (this isn't what the ads say) stopped in Bedford, Ind., while the passengers went into nearby restaurants for a quick meal . . . Guess they weren't taking any chances on arriving with a load of emaciated passengers . . . A recent Delta DC-4 flight between Birmingham and Atlanta carried three passengers whose reservations were made by a railroad after the choo-choo broke down . . . The New York, New Haven and Hartford had a freight wreck, with cars strewn over its four main lines . . . News reports estimated 48 hours to resume normal service . . . This is the railroad that has done so much advertising about reliability and which distributes little folders on its trains about the fellow who got canceled out on an air trip and took the train . . .

Slick Airways, a non-scheduled cargo carrier, has built up a pretty good reputation . . . Recently, however, some people thought this reputation suffered . . . Slick flew 5,200 lbs. of that new record, "Open the Door, Richard," from Los Angeles to New York . . . These people think that Slick would have done well to have had an emergency dumping over Lake Michigan . . .

Last issue we quoted two irate airline passengers who wanted to know why airport-to-downtown fares were the same on big coaches as on limousines . . . Someone is making a killing, they said . . . John Carey, president of Carev Airport Service, New York, shoots us a letter assuring them that "the killing has not yet taken place" . . . He also sent us a complete analysis of his 1946 operations, prepared by some impartial consultants, and, while it's not a direct answer to the question of the moment, it's very interesting reading . . . Carey netted only 5.8c out of every dollar taken in during 1946 . . . The report also shows that the limousines were moving in revenue service less than 50% of the time . . . The reason for this, the report says, is because the airlines don't permit "community" use of coaches . . . In other words, passengers for each flight of each airline must be given exclusive use of the ground equipment assigned to a particular flight . . . If coach trips could be regularly scheduled, and carry all passengers available, productive use would increase and fares could be lowered, says the report . . . This is an interesting angle.

Pan American Carries 27,300 Trans-Atlantic Passengers in Year

In a year of Constellation service ending Feb. 3, 1947, Pan American Airways carried 27,300 revenue passengers on nearly 1,000 crossings of the Atlantic, the company reported last month. Travel from Europe and Africa was generally higher than east-bound for the period surveyed: approximately 16,150 persons made the westbound crossing while about 11,150 flew east out of La Guardia Field.

June was high spot for the year with a total of 4,152 passengers spanning the Atlantic. In that month, one of three in which eastbound numbers were higher than westbound, 2,251 went over and 1,901 returned. PAA traffic officials attributed the high number of passengers during that period largely to vacation travel, particularly to Shannon, Eire.

Second largest number of crossings also occurred in June, with 58 flights over and 58 back for a total of 116. Peak month for crossings was January, 1947, when a total of 128 was chalked up.

The Pacific Division in the year ending last Feb. 1 carried 22,800 revenue passengers on 1,875 flights. The trans-Pacific movement was heavier eastbound with 12,900 arriving in San Francisco and Los Angeles from Manila, Australia, and Honolulu. Passengers departing from the states for Pacific points totaled 9,900.

Heavy Latin American Traffic in 1946

Record traffic to South American points in 1946 was reported by Wilbur L. Morrison, v.p. in charge of the company's Latin American operations.

A total of 738,850 passengers was flown over all L.A. routes—89% above the 390,426 in 1945, and 310% more than the 1941 total of 180,220.

In passenger miles flown, PAA showed a gain of 71% over 1945 and 459% over 1941. Totals were 525,047,073 during 1946, 306,107,550 in 1945, and 93,951,697 in 1941.

Air express shipments increased from 11,630,846 pounds in 1945 to 15,106,845 last year. The 1941 figure was 1,754,014.

29,728 Between U. S.-Alaska

PAA flew 29,728 passengers between Seattle and Alaska last year, compared to 1,800 in the last peacetime year, 1941. Revenue passenger miles totaled 28,000,000. Express on the Alaska Division amounted to 473,978 pounds, a gain of 156% over 1945, and mail 568,784 pounds, up 25%.

Airlines Terminal Co. in Operation

The Airlines National Terminal Co. has taken over complete operation of the Willow Run Airport following the transfer of all airline operations from Detroit Municipal Airport.

The airlines involved recently completed the signing of agreements with the terminal company which provide that the same schedule of landing fees previously in effect at Detroit Municipal shall be charged at Willow Run.

Announcing — Licensing of C-46 Transports by United Services For Air, Inc. Niagara Falls Municipal Airport

Now authorized by CAA to Certificate C-46 A & D Models

DRASTIC WAA C-46 PRICE REDUCTION

Price range per C-46 now \$10,000-\$12,500-\$15,000—depending on condition.

Quantities of C-46's in excellent condition available for purchase at USair's Niagara Falls Plant.

C-46 Market

*USAIR's C-46 conversion program opens a vast reservoir of proven military surplus transport planes to the world's air carriers. Owned by WAA and FLC, C-46 purchase and licensing may also be arranged through USair, or USair accredited aircraft brokers.

C-46 Specifications

*USAIR's converted C-46 is licensed under CAA 03 normal category for 45,000-pound gross weight. Modified version allows 17,000-pound useful load at cruising speed of 215 mph. 1500-mile operational range with reserve. Direct flying cost per ton mile less than seven cents.

C-46 Sales

*USAIR's world-wide C-46 sales program includes establishing sales-relations with reliable aircraft representatives. Attractive sales-brokerage plan available to houses that qualify as to integrity and ability to handle fleet aircraft sales.

*UNITED SERVICES FOR AIR, INC.

P. O. BOX 499

NIAGARA FALLS, N. Y.

Phones: 3721 — 3-2107

Cable: USAIR

Classified advertisements in AMERICAN AVIATION are worth many times their cost. • For complete information on rates and closing dates see page 42 this issue.

CAB Briefs

The general agency agreement between Pan American Airways and the United States Lines Co. has been recommended for approval by CAB Examiner Warren E. Baker. The examiner concluded that any conflict of interest between the two firms was so slight as to be completely outweighed by economies and benefits PAA obtained from the pact. Under the agency arrangements, PAA's ticket sales and promotion activities throughout most of Europe are handled by U. S. Lines' agents and sub-agents on a commission basis.

Disapproval of an interlocking relationship resulting from the holding by John W. Hanes of directorships in U. S. Lines, Pan American Airways, Inc., and Pan American Airways Corp. has been recommended by CAB Examiner Warren E. Baker. "Divergent interests" of the carriers was cited as the reason.

Wiggins Airways, Norwood, Mass., has applied for exemption order authorizing it to include Norwood as a stop on its feederline system. Company said its certificated stops at Taunton and Brockton, Mass., can not now be used because of unsuitable airports, and that a traffic stop at Norwood would serve parts of the same area.

Testimony in the recently concluded Air Freight Case hearing set a new record for length—5,780 pages of transcript. The Pan American Airways' Domestic Routes Case is runner-up with 5,582 pages. Previous record was held by an old PAA Latin American Division Mail Rate Case that lasted 5,290 pages. At a price of 30c per page, a participant would have to pay \$1,734 for a complete record of the Freight Case.

Wien Alaska Airlines' proposal to acquire the assets and certificates of another Alaskan airline, Ferguson Airways, has been approved by CAB. Ferguson's regular and irregular route certificate will be transferred to Wien, which will operate the routes as part of its system. The sale agreement provides that the purchase price is \$32,000, payable \$20,000 upon execution of the agreement, the balance in annual instalments of \$5,000 each. Wien's routes lie mainly in northeastern Alaska in the area including Fairbanks, Fort Yukon, and Nome.

A CAB decision on Jan. 23 placed Montego Bay, Jamaica, on the Caribbean routes of Chicago and Southern Air Lines and Pan American Airways. Application of Eastern Air Lines to serve the seaside resort was denied because CAB found the traffic potential insufficient to justify the operation without extensive government support.

New trunkline service between Chicago and Seattle plus proposals for feederline and pick-up service in the northwestern states are before CAB for decision following oral argument in the Chicago-Seattle Case. Great Northern Airlines asked for a new trunk certificate parallel to but north of Northwest Airlines' present route. Duluth Airlines' attorney argued for a local and feeder service in the area between Chicago and Fargo, N. D. The third applicant was G.I. Airlines, asking pick-up service in Wisconsin and Illinois with a few stops in Michigan, Minnesota and Iowa. United Air Lines and Northwest Airlines were the only airline interveners.

Removal of frequency limitations in the Los Angeles-Mexico City foreign air permit held by Compania Mexicana de Aviacion, S. A. has been recommended by CAB Examiner Richard A. Walsh. CMA is now limited in its permit to three round trips weekly, although in practice the company has been allowed unlimited frequencies by exemption. Walsh found that principles of international reciprocity require removal of the restriction.

CAB has granted United Air Lines authority to operate non-stop service between Detroit, Mich., and New York, N. Y., and between Detroit and Allentown, Pa., on its route No. 1. Elimination of the stop at Youngstown, Ohio, will reduce the current travel time by 17 minutes eastbound and 24 minutes westbound on DC-3 schedules and 35 minutes eastbound and westbound on DC-4 operations.

CAB Proceedings

(A Summary of Applications Filed, and Actions of the Civil Aeronautics Board.)

Actions:

Feb. 10—Order instituting investigation of Hughes Tool Co.'s control of Transcontinental & Western Air, Inc. (Docket 2796).
Feb. 11—Decision granting Key West-Havana foreign air carrier permit to Aerovias "Q", S. A., a Cuban airline. (Docket 2374).
Feb. 14—Order opening investigation in passenger and cargo rates, fares and charges on all domestic airlines. (Docket 2808).
Feb. 18—Decision amending KLM-Royal Air Lines' foreign air carrier permit to include Ciudad Trujillo, D. R., as an intermediate stop. (Docket 2348).
Feb. 18—Order setting temporary mail pay rate of 35c per plane mile for Monarch Air Lines' Route 73. (Docket 2741).
Feb. 18—Decision approving acquisition by Wien Alaska Airlines, Inc., of the assets and certificates of Ferguson Airways, Inc. (Docket 2238).

Calendar:

Mar. 3—Hearing on All American Aviation's application for temporary authority to experiment with combination passenger-pickup service on Route 49 between Pittsburgh, Elkins and Huntington. (Docket 2366). Tentative.
Mar. 4—Hearing on the airport complaint of the City of Akron, Ohio. (Docket 2332). Examiner F. Merritt Ruhlén. Tentative.
Mar. 4—Oral argument on Pan American Airways' Latin American, and Miami-Leopoldville rate cases and on the Panair do Brasil contract investigation. (Dockets 1593, 1909, and 2032). 10 a. m., e. s. t., Room 5042, Commerce Building.
Mar. 5—Oral argument on Pan American Airways' Trans-Atlantic and Alaskan rate cases. (Dockets 1706 and 1499) 10 a. m., e. s. t., Room 5042, Commerce Building.
Mar. 10—Oral argument in the Mississippi Valley case. (Docket 548 et al.) Postponed from Feb. 24. 10 a. m., e. s. t., Room 5042, Commerce Building.

Apr. 1—Hearing on Caribbean-Atlantic Airlines' application for Caribbean routes. (Docket 2246 et al.) Examiner James S. Keith. Postponed from Mar. 1.
Apr. 21—Hearing on applications proposing service between the Pacific Northwest and Hawaii. (Docket 2537 et al.) Portland, Ore. Examiner Warren E. Baker.
May 5—Hearing on application proposing local service in western Washington (Docket 2368 et al.) Tentative. Examiner James S. Keith.
May 10—Hearing on application proposing additional service to Florida (Docket 1668 et al.) Tentative. Examiner F. Merritt Ruhlén. Postponed from Mar. 10.
June 16—Hearing on the Minot-Regina, Sask., application of Mid-Continent Airlines. (Docket 628). Examiner Lawrence J. Koster. Tentative.

Applications:

Air Brokers, Inc., 152 W. Wisconsin Ave., Milwaukee 2, Wis., for a certificate or an exemption order authorizing air transportation as a freight forwarder over scheduled and non-scheduled international lines. (Docket 2775).
J. E. Bernard and Co., Inc., 11 S. La Salle St., Chicago 3, Ill., for a certificate or an exemption order authorizing air transportation as a freight forwarder over scheduled domestic lines (Docket 2779), over non-scheduled domestic lines (Docket 2780), over scheduled international lines (Docket 2781), and over non-scheduled international lines (Docket 2782).
British Commonwealth Pacific Airlines Ltd., 44 Martin Pl., Sydney, New South Wales, Australia, for a foreign air carrier permit authorizing scheduled and non-scheduled passenger, property and mail service between New Zealand and San Francisco or Vancouver, via various intermediate points. (Docket 2777).
City of Clearwater, Fla., and Clearwater Chamber of Commerce for amendment to certificate of National Airlines, Inc., for

route 31 to redesignate the intermediate point St. Petersburg, Fla., as St. Petersburg-Clearwater, Fla. (Docket 2786).
Delta Air Lines, Inc., for amendment to its certificate for Route 54 authorizing scheduled passenger, property and mail service between Charleston, S. C., and Savannah, Ga. (Docket 2771).
Raymond H. Mattsen, 1621 E. 78th St., Chicago 49, Ill., for a permanent certificate authorizing scheduled passenger, property, and mail service over 424 miles of routes between Chicago and Escanaba, Mich., and between Escanaba and Marquette, Mich., Iron Mountain, Mich., and Grand Marais, Mich. (Docket 2768).
Monarch Air Service, 6054 S. Cicero Ave., Chicago 38, Ill., for an exemption order or permanent or temporary certificate authorizing air transportation as a freight forwarder over scheduled domestic lines (Docket 2759), over non-scheduled domestic lines (Docket 2760), over scheduled international lines (Docket 2761), and over non-scheduled international lines (Docket 2762).
National Air Cargo Co-ordinators, Inc., d.b.a. NACCO, 220 S. State St., Chicago, Ill., for a certificate or exemption order authorizing air transportation as a freight forwarder in the U. S., its territories, and all foreign countries over the routes of scheduled air carriers (Docket 2763), and non-scheduled air carriers (Docket 2764).
National Air Freight Forwarding Corp., 100 W. 10th St., Wilmington, Del., for a permanent or temporary certificate authorizing air transportation as a freight forwarder over any and all air routes—scheduled or non-scheduled, domestic or international. (Docket 2774).
Pacific Northern Airlines, Anchorage, Alaska, for an amended certificate authorizing service between Anchorage and Juneau so as to redesignate Juneau as an intermediate point and extend route to Seattle. (Docket 2620).
Pacific Northern Airlines, Anchorage, Alaska, for an exemption order authorizing scheduled passenger and property service between Juneau and Seattle. (Docket 2621).

SUMMARY OF U. S. DOMESTIC AIR TRANSPORT OPERATIONS FOR November, 1946
Compiled by American Aviation Publications from Official C.A.B. Data.

AIRLINES	TOTAL OPERATING REVENUES	PASSENGER REVENUES	MAIL REVENUES	EXPENSE REVENUES	FREIGHT REVENUES	TOTAL OPERATING EXPENSES	AIRCRAFT OPERATING EXPENSES	GROUNDS & INFRASTRUCTURE EXPENSES	OPERATING REVENUE PER REV. MILE	OPERATING EXPENSE PER REV. MILE	NET INCOME BEFORE INCOME TAX	NET PROFIT OR LOSS	TOTAL ASSETS
All American	\$ 61,248	\$	\$ 59,814	\$ 1,247	\$	\$ 79,015	\$ 36,347	\$ 40,668	41.4¢	53.5¢	\$ -42,903	\$ -42,903	\$ 2,346,318
American	7,071,790	5,768,563	337,910	260,315	259,935	7,110,481	2,924,922	4,185,559	114.7¢	116.1¢	\$ -280,550	\$ -56,371	\$ 128,785,832
Boeing	96,722	80,337	38,458	2,681	10,212	1,040,828	448,721	592,107	87.9¢	100.9¢	\$ -27,535	\$ -743	\$ 9,617,020
Caribbean	32,367	26,802	1,269	. . . .	1,003	40,001	16,326	23,674	103.9¢	128.4¢	\$ -8,273	\$ -8,273	\$ 407,401
C & S	529,727	484,699	20,183	23,009	4,089	879,913	347,567	532,345	60.6¢	134.3¢	\$ -350,842	\$ -350,842	\$ 6,781,625
Colonial	218,614	198,717	10,888	2,248	. . . .	377,920	157,650	220,269	70.1¢	121.4¢	\$ -160,897	\$ -160,897	\$ 2,885,672
Continental	275,047	208,475	46,488	2,644	2,817	374,316	146,617	227,698	73.1¢	99.5¢	\$ -15,485	\$ -51,346	\$ 2,789,571
Delta	903,960	831,220	34,204	21,559	6,716	1,102,948	531,328	571,620	87.9¢	107.3¢	\$ -210,868	\$ -130,738	\$ 6,099,162
Eastern	4,015,539	3,688,371	117,987	148,259	11,428	3,337,997	1,600,545	1,737,452	103.7¢	133.2¢	\$ 680,940	\$ 347,490	\$ 36,337,205
Hawaiian	246,645	189,813	1,202	8,175	25,295	251,446	94,719	156,727	122.4¢	127.9¢	\$ -10,613	\$ -10,613	\$ 2,273,370
Inland	113,397	67,310	43,118	1,650	397	142,728	62,837	79,890	79.4¢	99.9¢	\$ -29,260	\$ -18,521	\$ 638,548
NCA	387,252	300,987	76,012	5,331	. . . .	408,599	173,992	234,606	77.9¢	87.3¢	\$ -15,188	\$ -8,505	\$ 2,841,945
National	902,333	833,164	31,507	9,090	2,469	846,885	406,106	440,778	106.9¢	102.2¢	\$ 50,040	\$ 32,265	\$ 8,316,405
Northeast	400,476	360,804	32,999	4,140	. . . .	547,482	273,534	274,048	97.6¢	133.2¢	\$ -190,458	\$ -190,458	\$ 4,136,762
Northwest	1,487,959	1,328,246	102,822	33,000	4,593	2,033,956	781,082	1,252,873	90.6¢	124.2¢	\$ -554,071	\$ -304,269	\$ 20,050,349
PCA	1,543,416	1,375,358	39,325	73,146	33,474	2,044,414	861,071	1,183,343	99.1¢	131.3¢	\$ -484,430	\$ -484,430	\$ 21,676,074
Prosemer	59,356	26,317	18,316	205	. . . .	77,279	35,802	41,477	69.2¢	102.2¢	\$ -26,779	\$ -26,779	\$ 118,677
TWA	1,130,800	909,565	95,397	61,974	18,632	2,704,868	921,523	1,823,345	86.1¢	108.9¢	\$ -1,712,691	\$ -1,712,691	\$ 69,123,311
United	4,514,917	3,687,737	334,837	250,616	171,312	5,683,413	2,124,883	3,558,529	99.7¢	125.6¢	\$ -1,061,148	\$ -613,148	\$ 54,638,122
Western	810,721	727,341	37,541	23,174	8,982	1,149,358	540,043	609,315	110.3¢	156.4¢	\$ -233,210	\$ -139,926	\$ 12,520,099
TOTALS	25,549,528	21,796,846	1,480,279	959,593	561,284	30,274,447	12,487,505	17,786,933	100.2¢	118.7¢	\$ -4,718,171	\$ -3,891,198	\$ 393,075,428
TWA	2,530,674	2,193,173	129,215	109,791	56,347	4,074,482	893,494	3,181,028	93.3¢	150.2¢	\$ -1,678,407	\$ -1,623,854	\$ 73,285,509

* TWA operations were suspended until November 15 because of pilot strike.

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Carriers Gaining Better Balance in Freight Operations by Pushing Up Eastbound Loads

By FRED HUNTER

Eastbound air freight loads are climbing. They are changing in character, too . . . for the better. Shipments of general merchandise are showing up on eastbound way bills, along with the flowers and the perishables, and that's the money-in-the-bank trend air cargo traffic representatives have been waiting for.

Slick Airways, for example, has pushed its eastbound load factor up to approximately 63%. The contract carrier still has quite a way to go to catch up with the approximately 96% westbound load factor, but it represents a marked gain and continued improvement is anticipated.

The development of air freight saw backlogs pile up in the eastern terminals like LaGuardia and Newark, but a large proportion of the return eastbound flights were characterized mainly by the unused space available. The reason is that the heavier normal freight movements for all forms of transportation are from east to west because the larger manufacturing and distribution points are in the more populated east.

Perishables—flowers, fruits and vegetables—comprised the principal eastbound loads and these, of course, had a highly seasonal aspect, which made for virtually empty airplanes when the cantaloupes called it a day and the lilacs began to droop.

Garment Industry Booms

Where the air freight carriers are beginning to cash in on a solid basis is California's lusty garment industry, which has bloomed into a \$400,000,000 a year business in the last few years. That's a drop in the bucket to the volume of New York's garment business, but it's big enough for 14 railroad carloads of sportswear and similar merchandise to be shipped east out of Los Angeles every night.

The promotion-conscious eastern garment trade started using air freight to speed deliveries of their fashions in mid-1946 after rates dropped to approximately the level of air express, but the California stylists were less competitive and remained more or less aloof, especially as they found no demand for faster service from their outlets.

The diminishing buying spree brought the change. Competition became keen and the California manufacturers of slacks, bathing suits, play suits and sports clothes suddenly discovered they had to speed up deliveries to protect their markets.

Slick Airways has recently consummated a contract with the metropolitan traffic group in New York to air freight merchandise from Cali-

fornia. This group includes the big New York department stores like Macy's and Gimbels and represents a huge traffic potential. This contract is expected to increase Slick's eastbound load factor still further.

Larger Cal Eastern Volume

California Eastern's DC-4's also are carrying larger volumes of fashion wear and general merchandise. Recently, a shipper sent 100,000 leather jackets to Detroit on a California Eastern flight. His computations showed he actually saved money on the shipment because he simply tossed the jackets in the plane and had no packing cost. The jackets arrived in as good condition as if he had neatly boxed each one individually.

Increased eastbound tonnage was an important factor in boosting the Flying Tiger Line's traffic above one million ton miles a month.

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California Eastern Airways has expanded its traffic department, recent additions to its Oakland headquarters being George Wells, formerly traffic representative for Ford Motor Co. and Continental Sky-Van, and John Edmundson, former cargo manager for Western Air Lines.

Transocean Air Lines, headquartered at Oakland Municipal Airport, was slated to inaugurate all-cargo service between the Pacific Coast and Honolulu Feb. 28 with minimum of three round trips weekly, according to Orvis M. Nelson, president. Main ports of call will be Oakland airport and John Rodgers Field, Honolulu.

American Air Export & Import Co. (AAXICO) has announced inauguration of direct flights from New York City to Port au Prince, Haiti.

Consumers Air Freight Corp. has been organized as a non-scheduled carrier with offices at 29½ Main St., Champaign, Ill. The company operates one DC-3 type aircraft and has been specializing in flights involving sports activities.

Santa Fe Skyways, Inc., which on Feb. 3 inaugurated a contract air freight service between San Francisco and the midwest, has appointed Mayo H. Thomas as its general agent in the western territory, with headquarters at Los Angeles. Thomas served during the war with the Air Technical Service Command of the AAF.

Veterans' Air Express Co.'s co-trustees have reported to the company's creditors that by completion of modification work on the two Douglas C-54's owned by the company, now located at the Matson Navigation plant, Oakland, these planes can be put into profitable operation, enabling the trustees to begin paying off the debts of the concern.

Winged Cargo, Inc. has announced appointment of George T. Eckart, former Army flyer and airline representative in South America, as administrative assistant to Fred P. Dollenburg, president.

3,585 Non-Scheduled Operators Apply for CAA Certificates

A total of 3,585 operators had applied for non-scheduled air carrier operating certificates as of the end of January, the Civil Aeronautics Administration reported last week.

The CAA was quick to admit, however, that its information as to non-scheduled operations was "incomplete," since "the industry has begun to develop almost entirely within the past year, and so far no recurring reports of its activities have been required."

Part 42, of the Civil Air Regulations, which for the first time prescribed safety regulations governing non-scheduled operators engaged in interstate, overseas and foreign air transportation, and required them to obtain air carrier operating certificates, did not become effective until last Sept. 15. CAA reports show that 3,061 operators signed up prior to the deadline date.

500 More Operators

A recapitulation of applications and requests for information disclosed that more than 500 additional operators have entered the field since then. There is no check on the number of non-scheduled operators who may have folded up in recent months, but it is believed the number was considerable.

The 3,585 operators included in the CAA figure represent about a 30% increase over the CAA's estimate last summer that there were approximately 2,700 in the country.

Last summer's estimate as to the total number of aircraft engaged in non-scheduled operations was 5,500, but the 3,585 operators on record as of the end of January reported ownership of 16,850 planes. Of these, 14,460 were single-engine aircraft, 2,190 were twin-engined and 200 were four-engined.

Waterman Seeks Suspension Of Alabama Operation

Waterman Airlines is seeking temporary suspension of its intrastate operation in Alabama through application filed with the Alabama Public Service Commission. If favorable action is forthcoming, the company plans to shut down immediately.

The company was said to be basing its case upon a showing that it has lost approximately \$500,000 in operating Mobile-Montgomery-Birmingham service. Testimony will also be given to show that CAB requirement limiting the line's business strictly to intrastate passengers has materially reduced its load factors. The airline's personnel and DC-3 equipment are expected to be absorbed in the company's contract operations.

FIXED-BASE

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DC-3 Engine Exchange Deal Announced by Pacific Airmotive Co.

Southwest Airmotive Co., of Dallas, has announced an engine exchange arrangement, under which operators of C-47's and DC-3's can replace power plants without grounding their planes during the normal overhaul period. The new SAC plan offers completely majored Pratt & Whitney R1830-92's in immediate exchange for engines of a similar type which have been pulled for normal overhaul. Flat price is \$3,000, plus the "trade-in."

Equipped with overhaul carburetors, magnetos, and ignition harness, the engines will, on request, be "pickled" and boxed for export or storage. They carry the company's standard warranty of 100 hours or 60 days, whichever is less.

Without exchange, the engines will be sold for \$5,000.

SAC also will deliver R1830-43, R1830-65, or R1830-67 engines, converted to R1830-92, for \$4,000 without exchange. These have overhauled rear cases. Power sections have 50 hours or less since new.

In a move to provide a ready source of spares for Beechcraft D18S planes, the company has established fixed fees both for exchange and for normal overhaul of 20 components, including engines, propellers and a variety of instruments and accessories.

The firm also has announced an engine spare plan for Grumman Mallard amphibians.

New York Aviation Trades Association, at its organizational meeting on Feb. 6 elected Guy A. Ham, Jr., president of Cape Aircraft, Inc., Glens Falls, N. Y., as its president and board chairman. John J. Drescher, Beacon Flying Service, Clarence, N. Y., was elected vice president, and H. L. Wheeler, Buffalo Aeronautical Corp., secretary and treasurer. Three committees were appointed with Charles P. O'Connor, of O'Connor Aircraft Co., Albany, chairman of the airports and legislative committee; O. P. Harwood, Gillies Aviation Corp., Hicksville, chairman of sales and service; and Drescher, chairman of the instruction and training. The organization was formed as the New York chapter of the National Aviation Trades Association.

Parks Aircraft Sales & Service, Inc., East St. Louis, Ill., has announced the resignation of Alden B. Woodbury who, until Feb. 1, held the position of vice president and general manager of Parks bases in Ohio. Parks has reduced its distributorship network from seven to six states, dropping Ohio and retaining Missouri, Illinois, Indiana, Kansas, Iowa, and Nebraska. The company will maintain full service operations in one Ohio city—Columbus.

Sky Travel, Inc. has acquired all of Parks Aircraft Sales and Service facilities at Cleveland Municipal Airport. President

of the firm is Robert D. Thum, who was an independent sales representative for Parks. William L. Walker, vice president and general manager, was formerly manager of the Parks operation, and J. C. McChesney, supervisor of aircraft maintenance, served in the same capacity for Parks for 12 years. Sky Travel will continue to expand its "fly-it-yourself" rental service which has been in operation for three months. Completely radio equipped Ercoups are used in the rental service, and convenience is stressed by providing a no delay "step from car to cockpit" service for renter-pilots.

Grand Central Airport Co., Glendale, Calif., has named D. C. Cochran head of the operations control division, succeeding Harry Hemler who has been placed in charge of sales. Cochran was with Douglas Aircraft Co. before joining Grand Central as repair division superintendent.

Brayton Flying Service, Inc., St. Louis, Mo., has appointed William M. Thompson, long-time executive of Parks Air College and Parks Sales and Service, Inc., as administrative assistant.

Hawthorne Flying Service, Greensboro-High Point, N. C., has announced election of Ralph C. Crocker, manager for the past two years, as vice president of the company.

Air Problems Face Discussion

Seventeen "grass roots" aviation problems are on the agenda for discussion at a two-day aviation clinic to be held Mar. 19-20 at the Congress Hotel, Chicago, with the Civil Aeronautics Administration and state aeronautics commissions in the midwest as joint sponsors.

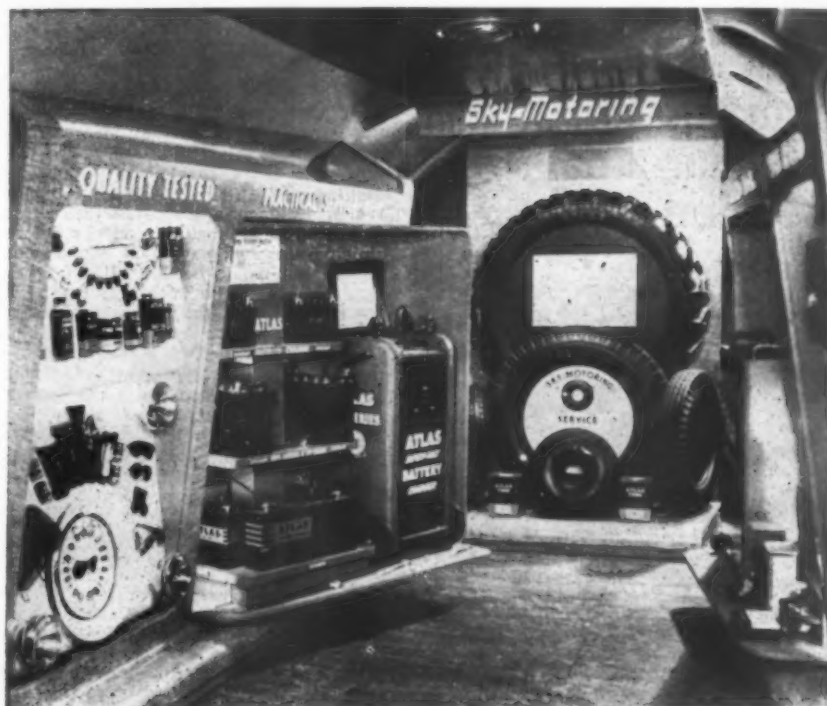
Changes in Mechanic Certificates Proposed

A list of proposed changes in the certification of mechanics and mechanics schools under Parts 24 and 53 of Civil Air Regulations is being circulated for industry comment. A number of the requirements now being proposed are included in the CAB Safety Bureau's draft release as a result of suggestions received in reference to proposals circulated last year. Industry comments on the proposals (listed in Draft release 47-2) are requested prior to March 20.

The proposals provide for changing present mechanics certificates with aircraft or aircraft engine ratings to certificates with separate ratings covering (a) airframe; (b) power plant; (c) aircraft inspector; (d) propellers; (e) instruments; and (f) radio.

Provision also is made for permitting certificated mechanics with inspector ratings rather than CAA representatives to return aircraft to service after major repair or overhaul. It would further permit them to make required annual aircraft inspections.

Establishment of separate ratings for propeller and instrument mechanics is intended to provide a simpler method of service than the existing requirement that major overhaul of propellers and instruments be made either by a certificated repair station or the manufacturer of the product.



Atlas Flying Showroom—Numerous merchandising ideas for aviation accessories are included in this DC-4 flying showroom which Atlas Supply Co., retail marketing affiliate of Standard Oil Co., is sending on a tour of 800 airports throughout the U. S. and Canada. In addition to a complete display of Atlas automotive and aviation products, the plane's cabin has 16 lounge-type chairs and a movie projector for use in sales training sessions for dealers.



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AIRPORTS

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DuBuque Quits Dallas Job; Charges 'Politics'

City politics, resulting in his having "full responsibility and duties . . . without authority to make decisions" resulted in the resignation last month of Jean H. DuBuque as director of aviation for Dallas.

DuBuque, who took the job last August, said he had received little cooperation from the city manager, that "vital" recommendations had been dismissed, that no action had been taken on a master plan for aviation, and that the city had been kicking the airlines around on the use of Love Field. He said he had wanted a non-political aviation board created to assist the aviation director.

Pat Moore, executive secretary of the American Association of Airport Executives, said: "I agree with DuBuque that Dallas has no aviation policy because of political interference." DuBuque's successor is James Wycoff, who was formerly assistant director. DuBuque is doing aviation consulting and public relations work in Dallas.

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Washington: Hervey F. Law, administrator of Washington National Airport, told the House Interstate and Foreign Commerce Committee that the nation's capital needs an additional airport to handle air traffic safely when instrument conditions prevail. He declared it "most important and necessary to have multiple landing fields in the large metropolitan areas," pointing out that Washington needs a second field now and a third later.

Baltimore: British Overseas Airways Corp. has signed a three-year lease for marine terminal facilities of Baltimore Municipal Airport, paying \$10,000 a year flat rental, plus a "head tax" and other considerations. The city reserves the right to let other flying boat operators use the terminal, so long as there is no interference with BOAC's operations.

Puerto Rico: Civil operation of Isla Grande, P. R., International Airport is slated to begin about April 1, under permit issued by U. S. Navy to the Puerto Rico Transportation Authority. The permit will include the entire north side of the airport which will be separated from the Naval Air Station. Navy has advised Pan American Airways that a modification of their present permit will be required waiving all of their existing privileges with exception of property rights in their buildings and facilities. These the Authority will rent for \$20,000 a year, then re-rent certain portions to PAA for \$7,000 a year. The Authority plans to build a large but temporary and movable terminal building at cost of about \$150,000, to alleviate existing congestion.

Philadelphia: The proposed master airport plan for the Philadelphia-Camden metropolitan area is described in a 98-page booklet being distributed by the City Planning Commission of Philadelphia. The

program encompasses an ultimate system of 44 airports, 28 of them new, including three commercial airline airports, three commercial non-scheduled (service) fields, 35 personal plane and mixed operations airports, and three Naval fields.

Chicago: Ralph H. Burke, consulting engineer, has been hired as airport consultant for the city of Chicago in connection with the city's proposed \$70,000,000-\$100,000,000 airport construction and development program covering the next five years. Burke will direct engineering studies and designs, and supervise construction at Douglas airport, which is to be Chicago's principal field. This airport, 18 miles northwest of the Loop, will consist of 12 tangential runways, each 6,150 or 8,000 feet long, depending upon adoption of one of two plans now under consideration. Construction has started on Chicago's lake front air strip to be located 10 minutes from the business section. This strip will be 2,800 feet long and cost \$1,397,000, and is slated for preliminary use this summer.

St. Louis: Plans for a 30-day shutdown of Lambert-St. Louis Municipal Airport to all airline operations and student instruction while a new 9,200-foot runway is under construction this spring has been announced by John Randolph, airport manager. During the shutdown, the commercial airlines are expected to use Scott Field, located near Belleville, approximately 28 miles from downtown St. Louis.

Willow Run: Official dedication of Willow Run as a commercial airline terminal will be part of the program for Michigan Aviation Week, May 24-June 1, sponsored by the Aero Club of Michigan. Detroit city airport, vacated by the airlines, will be used for a display and demonstration of personal type aircraft, accessories, helicopters, and related service industries.

Fort Lauderdale, Fla.: The 1,195-acre airport transferred to the city by the Navy for a nominal fee will be ready for full-scale operations by Jan. 1, 1948, according to Airport Manager Whitbeck.

Airport Amendment Proposed

Notice must be given to the Administrator of Civil Aeronautics of construction of a landing area, any boundary of which shall be within five miles of the nearest boundary of an existing field, under an amendment to Part 525 of Civil Air Regulations circulated for comment. The amendment, if adopted, probably will primarily affect proposed landing areas within five miles of airports served by scheduled airlines.

New York Airports Outgrown

Air traffic in the New York area will exceed the capacities of La Guardia Field, Newark Airport and the yet unopened Idlewild some time next year in the opinion of W. E. Cullinan, Jr., superintendent of the airports branch of Region 1, CAA.

Cullinan said construction of a fourth major airport in the New York metropolitan area will be necessary within a few years as a result. He added that such a proposal already is contained in a major study prepared by the Regional Plan Association.

AMERICAN AVIATION

Pan American to Expand Airline Interests in Syria, Cuba

Contracts to Give Extensive Assistance to New Syrian Line

By FRANK M. HOLZ

Pan American Airways has announced plans for intensified operations in two widely separated areas of the world—Cuba in the Caribbean and Syria at the eastern end of the Mediterranean. PAA will manage a new Syrian company and will expand one of its oldest subsidiaries, Compania Cubana de Aviacion, following lapse of a purchase option whereby another Cuban airline, Expreso Aereo Inter-Americano, could have acquired control.

PAA has contracted to provide extensive technical assistance to Syrian Airlines, a newly-formed Syrian company with headquarters in Damascus. According to information from the Middle East, the arrangement appears to be a management contract. PAA will also carry on a training program for Syrian personnel.

Authorized capitalization of the new company is reported as \$1,320,000. At least a quarter of the shares (7,500 of 30,000) have been subscribed. PAA spokesmen maintain that current arrangements do not include any PAA ownership in the Syrian company.

Hamilton J. Smith, a former PAA captain, has been placed in charge of operations. He is to be outranked only by a general manager who will be a Syrian and will probably be selected from the present Syrian board of directors. Charles Waggoner, also formerly with PAA, is in Damascus studying traffic problems of the new firm.

Syrian Airlines has purchased two Douglas C-47A transports from U. S. surplus. They have been converted for passenger services and at least one of the C-47's has been delivered.

It is understood that the main routes of Syrian Airlines will be Ankara-Damascus-Baghdad-Teheran and Ankara-Damascus-Yedda-Dharan. Shorter routes will link Damascus with Aleppo, Gezira, Cairo and Lydda.

Fails to Exercise Option

Expreso Aereo Inter-Americano, S. A., failed to take up an option to purchase controlling interest in Compania Cubana de Aviacion, PAA's Cuban subsidiary. A conditional sales agreement reached last July included an option for purchase by Expreso of PAA's 52,000 shares in Cubana at a cost of \$1,092,000. Shares outstanding total 100,000.

It is believed that the decision to let the purchase option expire was made by officials of Transair, Inc., of New York, which bought heavily into Expreso in November and now has active management of the Cuban firm. Hugh Fenwick, general manager of Transair, has replaced Donald Stewart as Expreso's executive vice-president, although Stewart remains in the management.

Acquisition of control of Cubana would have given Expreso a dominant position in Cuban air transport, with competition from only one other Cuban-flag scheduled operator—Aerovias "Q", a comparatively new company. Expreso and Cubana are competitors on several domestic routes and both operate scheduled services between Havana and Miami.

PAA will now abandon all plans to sell Cubana and will initiate an expansion program for the subsidiary, according to Wilbur L. Morrison, PAA vice president in charge of the Latin American Division. Plans include extension of services to Mexico and Jamaica and possibly also application to the U. S. Civil Aeronautics Board for direct service between Havana and New York. Cubana will file for a Cuban permit to fly to Spain and Portugal, for which Douglas DC-4's would be acquired. Present Cubana fleet consists of six DC-3's and two Lockheed Electras.

McConachie Named President Of Canadian Pacific Air Lines

Grant W. G. McConachie has been appointed president and chief executive officer of Canadian Pacific Air



McConachie

Lines, succeeding W. M. Neal who has been named president of Canadian Pacific Airways, which controls the airline. McConachie has been assistant to the president for about a year. For several years previously he was general manager of CPA's western lines, with offices at Edmonton. During this period he was active in developing CPA routes in Canada's North and Northwest.

IATA Extends Traffic Resolutions for Europe

In recent weeks a regional meeting of the International Air Transport Association (IATA) extended existing traffic resolutions for Europe and a meeting of an IATA technical group discussed world-wide standards for airports and ground aids.

A five-day meeting of the IATA European Traffic Conference held at Estoril, Portugal, revalidated existing traffic resolutions without major changes. Regulations on rates, conditions of carriage agency requirements, baggage allowances, etc., were due to expire on Feb. 28, but will now remain in effect until the forthcoming organization of a new IATA Traffic Conference which will combine the areas covered by the present European, Middle East and African Conferences.

The Estoril meeting agreed in principle on a revised schedule for summer fares. Details are to be worked out at a special meeting to be held in Paris March 11.

J. W. S. Brancker, traffic manager of British European Airways, is chairman of the present European Traffic Conference. Two new voting members were admitted—Swedish Intercontinental Airlines (SILA) and Polskie Linie Lotnicze (LOT) of Poland—bringing the total to 19.

An IATA technical group—known officially as the Aerodromes, Air Routes and Ground Aids Sub-committee (AGA for short)—met in New York last week to work out problems of achieving world-wide uniformity of airport and airway standards. Agenda topics included: navigation aids for long-range, short-range and contact flying; airport approach and landing facilities; visibility conditions; approach and runway lighting; airport site planning and payout; runway dimensions and design; terminal building design.

High Intensity Lighting

The group urged PICAQ to initiate the quickest possible action to get high intensity lighting installed at all international airports. AGA also pointed out that many of the airlines are ready and willing to use instrument landing systems such as ILS and GCA, but that the chief delay is in installation of the ground equipment which, for the most part, is the responsibility of government and airport authorities.

In a statement after the meeting, AGA Chairman Carl Kneisel said that some of the world's airports and airways are more inadequate for modern aircraft than inns built for stagecoaches were for automobiles. "In no form of transport has the disparity between equipment and facilities occurred so quickly and on so wide a scale as in international air transport," Kneisel said, pointing out that provision of improved airports and ground aids is now one of the most urgent needs to increase air travel safety.

Rigorous Testing Underway With New Transport Models

DC-6 Expected to Reach Scheduled Airline Use First

By SCOTT HERSHEY

The first new postwar air transports—a number of which are now flying—will be seen on the nation's airlines within the next few months barring the now unforeseen in testing and delivery.

In line with the safety campaigns of the aircraft manufacturing and air transport industries, intensive and rigorous test programs are being carried out. Both static and flight tests are in excess of the minimum requirements and the Civil Aeronautics Administration, in addition, is intensifying its inspection.

The Douglas DC-6 probably will be the first of the strictly modern craft to appear on schedule runs since three of these planes have been delivered each to United Air Lines and to American Airlines.

They are being flown over the routes of these two companies under experimental licenses to familiarize operating personnel with their handling and equipment. There may be some slight modifications required by the CAA, but tests thus far have not pointed to anything of a major nature.

In addition to the six already delivered, Douglas has eight or 10 under test flight at the factory and the assembly line is beginning to move on the backlog orders for about 150 of these planes which cost approximately \$640,000 each, not including spares.

Convair Delivery Delayed

Consolidated Vultee has about 160 of its Model 240 transport on order and is planning an 85-hour pre-CAA test before starting the regular test program prior to delivery. Delivery which originally was set for the first of April will now be delayed at least 60 days, perhaps more, because of inability to get component parts, with particular difficulty in obtaining landing gear. American Airlines has ordered 100 of these planes and probably will get the first delivered. Pan American, Western, Continental and a number of foreign lines also are waiting for the new Convair. The prototype has been flying since last July.

The Glenn L. Martin Co. is showing marked progress in the production of its 2-0-2 transports, with three of the airplanes completed, two under flight test and one under static. Reports on test flights have been particularly encouraging to Martin engineers. The flight test program which calls for 150 hours under CAA supervision is ap-

proximately half finished and on the static tests, all but testing the flaps has been completed and ok'd by the CAA. The company has nine 2-0-2's on the assembly line. Major assemblies have been completed for approximately 20 airplanes.

Delivery dates are still uncertain, depending here as in other places on weather and the test flight program. Orders from 16 different airlines for the 2-0-2 and the 3-0-3, the pressurized cabin model, now total 350. Martin's backlog order, including both military and commercial, is \$201,000,000.

Boeing, with 55 Stratocruisers on order at an estimated cost of \$1,250,000 each, plans to deliver the first this summer, barring unforeseen delays. Pan American heads the list of customers. The first C-97, Army version of the Stratofreighter, will be flown this month.

Lockheed has 65 Constellations scheduled for delivery this year, and hopes to reach an eight per month rate by October. Some 67 were in operation at the end of 1946. The company has indicated that it is still actively selling Connies for delivery in 1948 and later.

Hughes Aircraft is moving along with plans to launch its huge flying boat, the world's largest. Howard Hughes told the Senate War Investigating committee recently that the big boat would fly sometime this year, perhaps early summer.

Curtiss-Wright's CW-32 projected cargo plane is still in the lines-on-paper stage.

Ercoupe Plant Reopened; Prospects Believed Good

A marked lack of discouragement over 1947 sales prospects was reported from Ercoupe dealers and distributors visited by George F. Ryan, director of sales and service for Engineering and Research Corp., in a 48-state tour.

The company has reopened its plant at Riverdale, Md., after having been closed since Nov. 9. The reopening has been gradual, with supervisory personnel called back first and other employees being added. Ryan said it is expected that the plant will be back in full production in a month or six weeks.

Ryan disclosed that sales averaged about 200 a month during the time the plant was closed and that inquiries from dealers and distributors are being constantly received. A recent inventory showed fewer than 300 Ercoupes on the field and less than 300 in the hands of distributors.

Fairchild Completes Cross-Wind Landing Gear Project for CAA

Fairchild Aircraft Division of the Fairchild Engine and Airplane Corp., one of three aircraft manufacturers holding Civil Aeronautics Administration contracts for experimental work in the development of a lightweight, low-cost castored landing gear to facilitate cross-wind landings and take-offs, has completed its portion of the project.

Fairchild fulfilled its contract several days ago by delivering to CAA officials a PT-19 trainer equipped with a castoring or swivel-type landing gear. Meanwhile, the Goodyear Aircraft Corp. reportedly is making good progress with its adaptation of the castored-gear principle to a small high-wing plane—a Piper J-3—and the Firestone Aircraft Co. is beginning work on its phase of the project to develop a tricycle landing gear with all wheels castored. It is experimenting with an Ercoupe.

The CAA, which procured a special appropriation of \$150,000 for the cross-wind landing gear experiments, is pushing the project hard since successful development of such a gear would make possible construction of large numbers of small single-runway airports suitable for lightplane use at a fraction of the cost of building conventional three-way fields. Officials are hopeful that the new type gear will make possible a reduction in acreage requirements as high as 80% in some cases, with cost of runways reduced to one-third the present cost.

Service Testing Underway

The Fairchild plane was flown from Hagerstown, Md., to Washington by Lloyd Child, assistant to the administrator for personal flying development, and John H. Geisse, now serving as consultant with the CAA in completing the project which he originated as Child's predecessor.

It is now undergoing extended service testing at Washington National Airport, including landings in higher cross-winds than had been previously encountered, on both concrete runways and turf strips.

Existing airplanes of the PT-19 type could be converted to castored wheels in the field with only minor changes, and it is believed possible that a castored gear can be designed that will be equal in weight or be even lighter than present landing gear assemblies. The CAA hopes such gear can be designed so it can be built into planes on the assembly line or provided as "spare" equipment, installed easily in the place of conventional gear whenever so desired.

It is expected that the Goodyear plane may be delivered to CAA for service testing sometime this month, and that the Firestone plane will follow in a few weeks.

Martin Acquires Firm For Rotor Research

A special division to carry on research and experimentation in control systems, rotor hubs and blades for rotary wing aircraft has been established by The Glenn L. Martin Co., after a study of the helicopter field.



Larsen

The Martin company has acquired the assets and patents of Rotawings, Inc., of Philadelphia, and established headquarters at North Wales, Pa., where Agnew E. Larsen, formerly president of Rotawings, will be in charge of technical research and ultimately, prototype development.

Glenn L. Martin, company president, said that experiments with rotary wing aircraft have been going on for several years with varying degrees of success and "we believe that the Martin company can make its greatest contribution to this phase of aviation by concentrating, for the present time, on development of more efficient rotor hubs, rotor blades, control systems and power plant transmission drives."

Every 10 Seconds

It is an ironical circumstance that while occasional failures and losses in aviation receive wide and intense attention, the tremendous advances and remarkable conquests of mechanical flight in a single generation are quickly accepted as commonplace, Donald W. Douglas, president of Douglas Aircraft Co., declared recently. Contrasting front page headlines given to accidents with lack of attention given the successful completion of flights "with great regularity, speed and comfort," he pointed out that a Douglas plane takes off or lands somewhere in the world every 10 seconds.

Surplus Connie Bids Opened Mar. 12

Sealed bids to purchase nine surplus C-69 Lockheed Constellations will be opened at noon, Mar. 12 in the Office of Aircraft Disposal, War Assets Administration, Washington.

These planes were first declared surplus by the Army, then requisitioned by Navy under priority procedures. After consideration, Navy decided it could not use them.

Deluxe DC-6 for Truman

Douglas Aircraft Co. is building a special deluxe version of the DC-6 which will be assigned to the use of President Truman.

2,055 Personal Planes Shipped in January; Only 913 a Year Ago

The marked growth of the personal aircraft manufacturing industry is sharply pointed up by the report of the Personal Aircraft Council of the Aircraft Industries Association which shows 2,055 planes shipped in January 1947 as compared with only 913 in January of 1946.

Personal aircraft shipments in January 1947 increased more than 6% in numbers and 17% in value to a total of \$6,412,000 manufacturer's net billing price over December 1946.

Production data for the 12 companies reporting follow:

Company	Complete Aircraft Shipments	
	January 1947	December 1946
Aeronca	161	231
Beech	1	1
Bellanca	51	60
Cessna	420	439
Engineering & Research	N.A.	N.A.
Funk	7	13
Globe	N.A.	N.A.
Luscombe	120	170
North American	238	82
Piper	665	607*
Republic	103	45
Stinson	236	237
Taylorcraft	31	32
Texas Engineering	22	19
TOTAL	2,055	1,936

N.A. Not available
* Corrected

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North Americans, Fairchild, Vultees, Stinsons, Wacos, Stearmans

Lockheed: Lodestars, Hudsons, Electras

Boeing: 247-Ds

Beechcraft: Commercial Model 18s, Military AT-11s, AT-7s

Sikorsky: S-43s

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Wright: R-1820, R-975, R-760 all series.

Jacobs: 300—285—245—

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Financial News

Metropolitan Enters Airline Financing With \$10 Million UAL Loan

As part of its three-point \$49,500,000 financing program, United Air Lines has sold Metropolitan Life Insurance Co. \$10,000,000 par value, 3½% debentures due Feb. 1, 1967, marking the initial entry of Metropolitan into the airline investment field. An additional \$2,000,000 has been issued to Mutual Life Insurance Co. under similar terms.

In an amendment to its registration statement filed with SEC in connection with the new offering of preferred stock, United indicated that the 94,773 shares will have a dividend rate of 4½%, cumulative from Mar. 1, 1947. Each share will be convertible into four shares of common.

The preferred, with par value of \$100, will be convertible into common, with par value of \$10, at the option of holders at any time prior to Jan. 1, 1957. Any shares of preferred not subscribed by holders of warrants representing the right to subscribe will be purchased by a group of 38 investment bankers, headed by Harriman, Ripley & Co. The preferred is to be offered common stockholders at the rate of one share of preferred for each 19½ shares of common.

The third financing measure is a \$28,000,000 bank credit agreement arranged with 35 of United's depositaries through

the National City Bank of New York.

United has announced that it expects, through these steps, to provide necessary outside capital for completion of its purchase of new aircraft and for construction and acquisition of other facilities. Altogether, the company is spending about \$85,165,000 in its large-scale expansion, with approximately \$49,500,000 being raised through the new financing program, and the balance coming from other funds of the company.

Air Associates, Inc. has executed a revolving credit agreement with the New York Trust Co., providing for borrowings aggregating \$1,250,000, covering period expiring June 30, 1949. Interest rates are 2¾% on amounts borrowed and ¼ of 1% on the unused portion of the credit. Company reported a net profit for year ended Sept. 30 of \$102,687, equal to 76c on each of 134,905 capital shares outstanding, after all charges and after application of a carry-back tax credit of \$398,985. Operating loss before application of tax credit was \$296,298.

Glenn L. Martin Co. has voted quarterly dividend of 75c a share on common stock, payable Mar. 17 to stockholders of record Mar. 7. Company paid four quarterly dividends of 75c each in 1946.

Beech Aircraft Corp. operations for fiscal year ended Sept. 30 showed net loss of \$308,953, after application of loss carry-back amounting to \$697,025. Sales amounted to \$19,116,456.

Piper Aircraft Corp. reported net sales of \$11,197,358 for year ending Sept. 30. Operations resulted in loss of \$365,437 which was reduced by tax credits to \$26,437 which was charged to earned surplus.

MCA, NAL Report '46 Salaries and Holdings

Mid-Continent Airlines' and National Airlines' 1946 salaries and stockholdings have just been filed with the Civil Aeronautics Board (Schedule G reports). Information disclosed follows:

Mid-Continent Airlines		
	Salary	Shares Common
J. W. Miller, pres. & gen. mgr.	\$15,959.72	808
J. C. Collins, v. p. treasurer	8,633.79	309
J. A. Cunningham, v. p.-operations	9,348.10	50
H. W. Coburn, v. p. trfc. & advt.	7,509.30	500
C. H. Calhoun, v. p. maint. & eng.	8,130.67	none
G. D. Murdoch, v. p. planning	*	none
C. K. Ward, secretary	5,337.50	none
Directors:		
T. F. Ryan 3rd		91,597.3
J. W. Miller		808
T. N. Law		none
Mellon McGreevy		2,400
G. D. Murdoch		none
W. W. Hower		2,000

More than 5% stockholders:

T. F. Ryan 3rd	91,597 shares—23.52%
Zink & Co.	61,139 shares—15.70%
140 B'way, New York, N. Y. .	

* Murdoch joined company in mid-December.

National Airlines		
	Salary	Shares Common
G. T. Baker, president ..	\$20,000	168,532½
G. E. Gardner, exec. v. p.	18,000	none
J. C. Brawner, treasurer	8,400	none
H. C. Dobbs, v. p.-sales..	10,000	100
J. D. Crane, v. p.-maint.	10,800	238
R. P. Foreman, secretary	7,200	60
F. E. Howe, ass't sec'y & ass't treas.	5,750	none
T. A. Prevost, ass't v. p.	6,405	none
Directors:		
G. T. Baker		168,532½
G. E. Gardner		none
H. C. Dobbs		100
J. C. Brawner		none
R. P. Foreman		60
J. A. Thomas		1,900
G. W. Gibbs, Jr.		2,360
J. A. Waterman		606
E. P. Tallaferro		none
Paul Scott		none
William K. Jacobs, Jr. .		1,960

Schedule F report shows the only stockholder with more than 5% is G. T. Baker, with 168,532½ shares, or 22.47%.

Caribbean-Atlantic Applies For \$150,000 RFC Loan

Caribbean-Atlantic Airlines has applied to the Reconstruction Finance Corp. for a \$150,000 loan, it was revealed last week by Hubert Schneider, Washington attorney for the airline.

The loan, if granted, will be used to liquidate the airline's indebtedness and to provide additional working capital, he said. The company's three DC-3's and other equipment would be pledged as collateral. Such a loan also will require the approval of the Civil Aeronautics Board.

This is believed to be the first actual application to RFC by an airline for a loan since one was granted by the government agency to Northwest Airlines in 1938.

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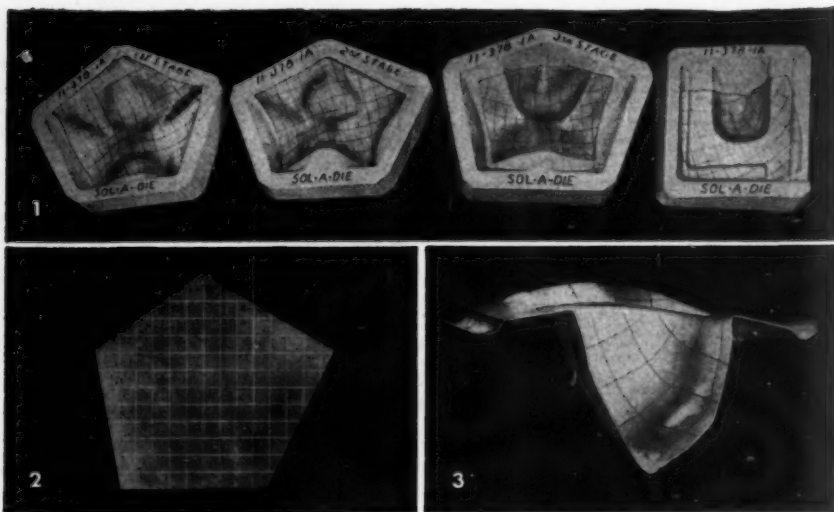


Photo #1 above shows a complete set of Sol-A-Die patterns. This set was used to stamp the gridded stainless steel sheet (photo #2) into the final part (photo #3). Note the minimum deformation indicated by the slight variation of the grid lines.

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March 1

Operations and Maintenance Review

Including

COMMUNICATIONS—NEW EQUIPMENT—GROUND FACILITIES

Slick Capitalizes on Surplus Stock in Sustaining Operation

Has Own Approved Overhaul, Instrument and Prop Shops

By DAVID SHAW

Like every new airline, Slick Airways had to give a lot of study to the economic advantages and disadvantages of trying to maintain and overhaul its own fleet. Faced with a choice of contracting all work, contracting part and doing the rest, or doing everything in its own shops, Slick officials decided early that their fleet of 10 C-46-E's could best be converted, serviced and overhauled in the company's own shops.

Starting a little more than a year ago with the 10 planes and virtually no facilities, the company in less than six months had all planes modified, CAA approved, and in regular service. Now, only a year after the first revenue flight was made, Slick has an approved aircraft overhaul center, approved instrument and propeller shops, and a complete engine overhaul shop which soon will be ready for approval. These facilities at the firm's headquarters in San Antonio are supplemented by a 75-man organization in Burbank which handles all checks, turnaround maintenance and radio service. System-wide service is insured by keeping a few additional men at San Francisco, Denver, Chicago and Newark.

In concluding at the end of a year that doing all their own work is a satisfactory and economically practical matter, Slick's maintenance staff acknowledges that without surplus shop equipment and spare parts the whole set-up might be less practical. With a rather modest outlay they have acquired equipment and facilities which would have represented a major, and perhaps prohibitive, investment for a pre-war airline.

Built Up With Surplus

As a matter of fact, the entire organization has been built up with surplus—and it should be able to run and even expand on still more surplus. The company was able to acquire a stock of 94 Pratt & Whitney R-2800-21 engines which were promptly converted to R-2800-75 models and stored away to replace other engines as they came due for overhaul. In this manner it

was possible to keep the fleet in operation without doing any overhaul work until adequate shop facilities were ready.

Plane parts have presented a somewhat more difficult problem than engines, since Slick operates more than half of the C-46-E's which were built. To offset the disadvantage of not being able to go to the manufacturer like most airline fleet operators, Slick has obtained all engineering drawings for the plane and now has something of the status of a manufacturer itself.

The airline has had occasional difficulties in getting spare parts to disabled planes along its routes, but fairly rapid and satisfactory progress has been made toward building up adequate supplies of parts and accessories at all points. With a small fleet and

a rather high load factor, the company must get maximum utilization from every plane. When one plane unexpectedly drops from service, the routing of other planes is readjusted.

At the present time, with aircraft utilization close to 10 hours a day, Slick is putting about 280 hours a month on engines. Overhaul periods are set at 800 hours but may be reduced to 750. All operations are planned to get the planes into San Antonio for engine changes and into Burbank for 100-hour and 200-hour checks.

Progressive overhaul on the airplanes is accomplished during 100-hour and 200-hour checks; fuselage, wings, empennage, hydraulic systems, etc., being overhauled during different checks so that at the end of each operating cycle the entire plane has been worked over without loss of revenue time.

Although Slick's Burbank base is a compact layout, the San Antonio base has the disadvantage of being scattered through a number of small buildings, most of them temporary structures put up by the Army at the Alamo air base

(Turn to next page)

343 Airliners Ready For Instrument Landings

Most recent Air Transport Association survey of the airlines' ILS equipment program shows that U. S. certificated carriers currently are operating 343 planes equipped with both localizer and glidepath receivers. An additional 455 planes thus far have localizer equipment only. Five airline fleets are completely equipped, and United, TWA and Western completed their programs but have removed glidepath receivers for modification.

A complete unit installation costs approximately \$650. The equipment enables the lines to use ground installations already installed by the CAA at 32 major airports. The CAA

expects to have 70 airports using the Instrument Landing Systems by April 1 as a part of the industry's intensive safety program.

Replacement of present glide path and localizer beams with Very High Frequency (VHF) could add considerable to the \$650 cost of present installations. The new high power VHF receivers cost approximately \$2,500 each. The VHF receivers, however, in addition to handling landing problems also will provide radio range systems, control tower contacts, etc. This is some time in the future since the lines are experiencing equipment shortages.

A summary of aircraft equipped for ILS reception shows:

Airline	No. Planes	Complete Installation		Localizer Only	
		4-Engine	2-Engine	4-Engine	2-Engine
American Overseas	23	23	..	..	..
American	140	48	92	..	..
Braniff	30	5	21	..	..
Continental	14	..	14	..	..
C & S	31	4	1	..	13
Colonial	17	..	1	..	15
Delta	22	7	..	..	15
Eastern	73	..	..	19	54
Mid-Continent	12	..	..	..	12
National	19	7	..	..	4
Northeast	14	3	2	..	9
Northwest	39	16	..	..	23
Pan Am	105	36	17	*23	*39
PCA	53	24	4	..	23
Pioneer	9	..	4	..	..
United	99	2	12	28	48
United	105	..	..	25	77
Western	28	..	..	13	15

* Marker beacon receivers only. United, TWA and Western were completely equipped; glide path receivers removed for modification.

and recently leased from the city. The only building which has been added to the leased structures is a large Quonset-type building which houses tear-down, cleaning, inspection and assembly facilities for the new engine overhaul center. Machine shop, welding, electrical accessories and instruments are handled in separate buildings.

Well-Equipped Fleet

In the course of conversion and periodic overhaul, the Slick fleet has been fitted to meet virtually all existing and anticipated CAA requirements. With the exception of a few hard-to-get accessories and fittings, all planes are ready to meet the new fire protection regulations. Localizer and glidepath receivers have been installed to permit using the CAA's instrument landing system wherever it is ready for use. Non-required items which have been installed and found advantageous include radio altimeters and Andover auxiliary power units for engine starting and power supply.

Interior modifications have included the insulation of all cabins, design and installation of a dry-ice cooling system which can hold perishables within a four-degree temperature range flying from coast to coast, and a recently installed hot air cabin heating system which uses four automatically controlled combustion type heaters.

To some of the smaller certificated passenger airlines, Slick's maintenance and overhaul facilities may look elaborate and costly. The company, which rates among the most business-like of the contract and non-scheduled carriers and is not given to careless cost estimates, is satisfied that the outlay is justified in terms of good work and reasonable costs.

Furthermore, the Slick organization has seen enough of the potential of air freight that it has no intention, once its status is clarified by the Civil Aeronautics Board, of remaining a 10-plane airline. The ground service organization has been developed with an eye to the future, and now that preliminary work has provided a smooth-running maintenance and overhaul set-up, present equipment and crews will be able to handle a bigger fleet with greater efficiency.



Slick Machine Shop—One of several annexes to the air freight line's new engine overhaul center in San Antonio, this building houses lathes, presses, contour forming machines and other metal working and testing equipment. Other buildings house teardown and assembly, welding, instrument overhaul, electrical accessories and propellers. Radio shops, along with most of Slick's facilities for aircraft maintenance and overhaul, are located at Lockheed Air Terminal, Burbank, Calif.

8-Point Flight Plan Aimed at Los Angeles Airport Noise Trouble

Complaints flooding in from irate citizens about the noise from low-flying planes at the new Los Angeles Municipal Airport are being met with an eight-point operations program agreed upon by the division chief pilots of the major airlines.

The Civil Aeronautics Administration and the airlines—Western, United, American, TWA and Pan American—formed a noise abatement committee consisting of the following: Jack Thayer, division chief pilot, Western Air Lines; T. S. Jobson, division chief pilot, United Air Lines; G. K. Rice, division chief pilot, TWA; R. V. Keeler, CAA senior inspector; and J. L. Fleming, PAA representative. The following eight-point operations program was agreed upon:

1. The minimum flying altitude over the Los Angeles range station was set at 1000 feet.
2. All pilots will arrange to arrive over the station using the lowest RPM

settings consistent with safety and the rates of descent specified by their various companies.

3. Pilots will make circle approaches at 1000 feet instead of 500 as allowed by the CAA, and particular attention will be given to keeping the noise level to a minimum.

4. Flights taking off the main east and west runways will proceed straight ahead to 1000 feet before turning, thus making the turn over the ocean instead of over the suburbs.

5. All flights taking off on the diagonal northwest and southwest runways will make a shallow turn as soon as possible after take-off and head out toward the ocean to 1000 feet before proceeding on course.

6. All flights taking off on the east, southeast and northeast runways will climb to a minimum altitude of 1000 feet before proceeding on course.

7. During instrument practice or instrument checks, the entire simulated approach altitudes will be increased 2000 feet unless otherwise stipulated by the CAA. This means that during practice, the simulated approach reading might be 400 feet while the plane is actually at 2400 feet.

8. Every effort will be made to hold take-off and landing practice at the airport to a minimum.

Revised CAA Flight Manual Shows New Facility Data

A new edition of the CAA's Flight Information Manual, semi-annual companion publication to the bi-weekly Airman's Guide, has just been issued through the Government Printing Office in Washington.

The new edition contains several chapters of information not included in the original edition. There is an aeronautical radio facility index, a list of air navigation facility radio call letters, a complete list of all standard broadcast stations, and data on Loran installations and Coast Guard DF stations.

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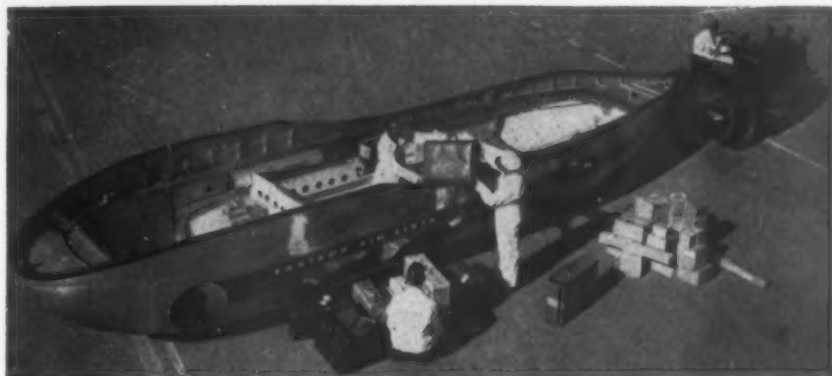
AAF Radar System Said to Combine Best In ILS and GCA

Development of an automatic radar landing system which can be used with a standard Ground Controlled Approach (GCA) unit was disclosed by Maj. Gen. Harold M. McClelland, Commanding General of the AAF airways and air communications service.

Gen. McClelland said the new system, a result of AAF radar research, would answer one of the major objections of some pilots to present radar low-approach systems which was that GCA units previously could not be combined with an automatic landing device. Pilots who have objected to GCA have preferred Instrument Landing System (ILS) which has been used with an automatic pilot for instrument landings.

The AAF contends that its new system which is being developed by the Air Materiel Command's Watson Laboratories, incorporates all the advantages of ILS as used with an automatic pilot as well as the advantages of radar GCA as now used.

Gen. McClelland said the new device will be able to land the following types of aircraft: (1) Aircraft not equipped with landing aids will land by the regular "talk down" method, with the control tower operators utilizing the normal monitoring scopes in or adjacent to the control tower room; (2) Aircraft equipped with visual instrumentation such as cross-pointed meters (as used with ILS) will be furnished information for manual landings by the pilot unassisted by ground controllers, and (3) Aircraft equipped with automatic pilots electrically connected to the radio landing equipment will be landed automatically unassisted by ground controllers.



Cargo Canoe—Designed to speed handling of air cargo and cut delays in servicing baggage, this newly-developed "cargo canoe" container will be a feature on the 60-passenger L-649 "Gold Plate" Constellations which Eastern Air Lines will place in operation this spring. The all-metal canoe will provide a capacity increase of four tons in payload. It is easily loaded inside the air terminal, towed out to the airliner by a tractor and quickly raised by built-in electric hoist into flight position on bottom of the fuselage. The unit has gross weight of 10,000 lbs., fully loaded.

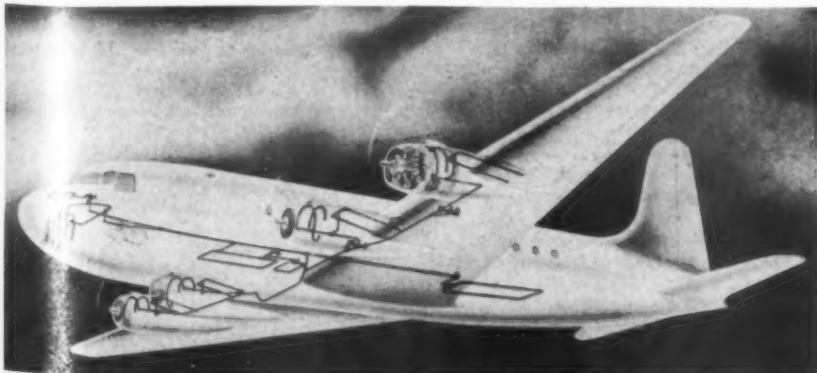
New De-icing Method For Propellers Tested By Hamilton Standard

Hamilton Standard Propellers, Division of United Aircraft Corp., has developed and tested a new method for electrical de-icing of both hollow steel and duralumin propeller blades. The system will be standard equipment on all Martin 202's and 303's and on all Hamilton Standard equipped DC-6's and Convair 240's.

Hollow steel blades are de-iced by current applied to special alloy heater wires cemented to the inside surface of the leading edge. On duralumin blades the heating element is made up of three layers of rubber, with a total thickness of about one tenth of an inch, mounted externally on the leading edge.

Electric current is taken from the aircraft battery and generator and carried to the propeller by a slip-ring and brush system from which wires

conduct current to the heating elements. Power supply is controlled by a timer which cycles current to one propeller at a time in order to minimize load on the electrical system. By means of a pilot selector switch in the cockpit heat can be applied to each propeller for 20 seconds and shut off for 60 seconds, or, under more severe icing conditions, it can be switched to run 60 seconds on and 180 seconds off.



New DC-4 Fire System—American Airlines, Republic Aviation Corp. and Walter Kidde Co. collaborated on the design of this new fire protection system for American's converted C-54's. Two banks of carbon dioxide cylinders, one for main discharge and the other for reserve, are mounted in the nose wheel well. Discharge is manually operated by control cables from the main instrument panel. Stop valves route gas from the main supply line to all fire hazard areas in the ship, and each area is protected by fire detectors.

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AM. AVN. 1 MAR 57



Control Tower Console—This new all-in-one control tower panel is undergoing AAF tests at Langley Field, Va. It makes available information and equipment which heretofore has been scattered throughout the tower, including flight plans, flight conditions, instrument and contact flight records, weather information, and a recording unit for all broadcasts. The console was developed by Watson Laboratories and the Airways and Air Communications Service of the AAF.

New Airway Radio Charts Developed at ATA Request

The U. S. Coast and Geodetic Survey has completed preparation of a

new series of radio facility charts, 42 in all, giving complete airway radio information similar to "Air Navigation Radio Aids" which was discontinued last year.

The new charts were developed at the specific request of the Air Transport Association. They will be revised weekly and sold on an annual subscription basis.

Each chart is printed on a standard 8 by 10½ paper sheet with margin for binding.

MACHINES MEN AND METHODS

Business success results from a proper combination of the right machines, the right men and, above all, the right methods.

The right methods in aviation mean, among other things, modern cost and performance control, scientific training, selection, and payment of employees, modern organization structures, and realistic personnel policies.

Where costs or income are "out-of-line", these can be improved by new methods, plans, or policies. Usually, such situations can best be judged and corrected through the objective perspective of competent management consultants, thoroughly experienced in aviation. An inquiry will show how we turn "Problems into Profits".



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Decca Seeks Experimental License for Tests from FCC

Decca Navigator System, Inc., American subsidiary of the Decca Navigator Co., Ltd., of London, has filed an application with the Federal Communications System for an experimental license to conduct operational trials under which aircraft and ships could be guided into the New York area under low-visibility conditions.

Dudley H. Toller-Bond, Decca chief engineer, said the trials could be held within five or six months after permission had been obtained from the FCC. A master station located at Yorktown, N. Y., and three "slave" stations in the general vicinity would provide radio navigation aids to planes in the airline sector bounded by Buffalo, Pittsburgh, Boston and Washington.

It is claimed the Decca system functions efficiently at any altitude and in System or Ground Control Approach any weather conditions. Its role, the company says, would be to "feed" planes into the Instrument Landing system in conditions of bad weather.

Freight Forwarders Association Formed

The Air Freight Forwarder Association has been formed by a group of independent air freight forwarders which met recently in Kansas City to discuss mutual problems, particularly in connection with the CAB hearings on the Freight Forwarder Case which opened in New York and in which all of the present Association members are applicants.

Jack S. Nelson, manager of Air Cargo Forwarding Agency, Kansas City, was elected chairman, and Richard D. Brooks, National Air Freight Forwarders, Detroit, is secretary-treasurer. The association has been incorporated in the District of Columbia, as a non-profit educational organization. Headquarters are at Suite 601, 1029 Vermont Ave., N.W.

The Association filed with the CAB a petition to intervene in the Air Freight Forwarder Case. The petition stresses the group's independence from all surface carriers and forwarders, stating: "... none of its members is controlled by or affiliated with surface carriers (either direct or indirect carriers) within the meaning of Section 408 of the Act." The petition also states that members have the status of non-certificated indirect air cargo carriers (air freight forwarders).

Charter members of the Air Freight Forwarder Association are: National Wide Air Freight Consolidators, Inc., Chicago; Air-Con, Inc., Chicago; National Air Cargo Co-ordinators, Inc., Chicago; Monarch Air Service, Chicago; Air Brokers, Inc., Milwaukee; Skyways Freight Forwarding Corp., New York; Stark Air Shipping, Inc., New York; Air Dispatch, Inc., Cincinnati; National Air Freight Forwarders, Detroit; Federal Air Freight Co. of California, Inc., Los Angeles; Air Cargo Forwarding Agency, Kansas City; Air Cargo Co-ordinators, Cleveland.

Boeing Seeks Better Seats

Air passengers, who criticize manufacturers for neglecting passenger comfort in their designs for long range transports, should be glad to know that Boeing Aircraft Co. has assigned a group of engineers to work solely on the problems of seating.

This group has designed and tested a pair of deluxe day seats, weighing only 75 pounds, and an identical appearing berthable seat, which Boeing likes so well that a special seat production shop has been set up to manufacture the seats for the Stratocruiser.

Special features of the new seat, in addition to roominess and comfort, are an arm rest control panel containing call bell and reading light switches, an "occupied" sign, seat number sign, reclining back control, ash tray, and a receptacle for holding a new Boeing-designed food tray.



Old Hands—Recognition for completion of 20 years' service with Western Air Lines has been given to Fred W. Kelly (left) and Charles N. James, two of Western's original four pilots. James is now v.p.-operations and Kelly is his assistant.

Operations Maintenance Personnel

Loren L. Brown, assistant station manager at New York, has been designated by Northwest Airlines to head all station activities in Tokyo.

Claude Wall, who was station manager for United Air Lines in Tokyo during its trans-Pacific operation for the Air Transport Command, has been appointed station manager in Honolulu.



Bolles

Wesner

Charles P. Bolles, formerly Eastern Air Lines station manager in Chicago, has become regional field superintendent for EAL's northwest division. He will continue to maintain headquarters in Chicago. Bolles joined Eastern as an agent nine years ago.

Merwyn O. Wesner has been assigned by National Airlines to the recently created post of supervisor of aircraft radio, to be responsible for installation, maintenance and overhaul of all aircraft radio equipment. Wesner, who joined National in 1941, has recently been radio maintenance foreman.

Frank Lardent has been named station manager for Western Air Lines at Lewistown, Mont., and Bill Spear chief pilot of the Inland division.

R. B. "Dick" Wagoner has been appointed superintendent of maintenance for the Contract Air Cargo Division of American Airlines, with headquarters at St. Louis, Mo. Wagoner joined CACD in April, 1946, when the division was formed, as general foreman in charge of maintenance. Frasier Morino succeeds him as general foreman.

Dewitt Greer, who during the war served as White House communications officer for Presidents Roosevelt and Truman, has been appointed communications superintendent of Pan American Airways' Latin American Division, with offices at Miami. He succeeds Wilbur W. Lynch, who has been transferred to PAA's system office in New York as supervisor of communications for the company's entire network.

30 Hour Check

By DAVID SHAW

Pioneer Air Lines down in Houston has just started service over 833 miles of new routes—more than doubling the size of its system and at the same time calling for a considerable fleet expansion. Although Pioneer's first DC-3's were converted by an outside contractor (the three Lockheed 10-A's used to start the service have been retired and put up for sale) the feederline now has a first-rate approved shop of its own. Under the supervision of Bob Sicard, some rather discouraging looking C-47's are going through the shop and coming out, one a month, as 24-place DC-3's. In three months Pioneer will have its complete fleet in operation—eight DC-3's and one C-47 which is used as a "tramp" cargo ship.

The belly "cargo canoe" designed to increase the Constellation's payload has been specified by Eastern Air Lines for all of the L-649 "Gold Plate" Connies which Eastern will start getting this spring.

We are pleased to hear about this—not because we are directly concerned with any airline's load-carrying ability, but because it may improve a situation which is causing a lot of customer complaints. We have reference to the way most of the airlines, in attempting in a simultaneous but not coordinated operation to promote an air freight service along with carrying passengers, are keeping the passengers waiting while they fumble a mixture of luggage, express packages and air freight into and out of the forward and aft baggage compartments.

Eastern plans to use the belly cargo container, sometimes called a Speedpak, for planned pre-loading and quick unloading of cargo which now causes annoying delays. The 33 foot container, which will hold up to four tons of extra payload, is lifted into position and lowered by means of an electric hoist installed

within the transport.

The "cargo canoe" has a special door through which single pieces of baggage can be removed. Interior compartmentation permits loading all baggage or freight for a particular destination into a separate container which can be pulled out at route stops without disturbing other cargo.

We've heard that some Constellation users have rejected this cargo container because it weighs 1,700 pounds empty and because, full or empty, its drag reduces cruising speed by quite a few mph. Eastern's attitude seems to be that even though they barely break even on the speed vs. payload argument, they'll be money ahead by giving the customers faster and more efficient ground service.

The mail the other day included an interesting but incomplete story from American Airlines. It tells about the automatic block signal system of air traffic control which American and the General Railway Signal Co. have been developing for the past five years. The story says that the system is now ready for flight testing. It mentions some of the things it is expected to do, but leaves us pretty much in the dark about how it does them.

The main thing it does is to provide an 80-track airway—five lanes wide and 16 altitudes high—with ground stations 10 to 50 miles apart which track all planes and put out automatic signals to aircraft enroute. Push buttons and lights in the cockpit handle all instructions and inquiries. If a pilot wishes to climb or descend he pushes the proper button and a second or two later a light shows yes or no. If a dispatcher or traffic controller on the ground a hundred miles away wants to move one plane or several planes from one track to another, he throws certain switches and pilots take their instructions from the lights which come on.

This sounds like a very fine thing, but sort of complex as to mechanism. At the first opportunity we want to sit down with Capt. Sam Saint, who has done most of American's work on it, and inquire about what makes it work.

Climatic Data Sought

Data concerning climatic conditions under which aircraft should be operated have been requested of the airlines by the Civil Aeronautics Administration. CAA is supposedly giving consideration to temperature limits of—65 degrees to 200 degrees Fahrenheit.

Military intentions of obtaining air-

craft suitable to hot or cold operations supposedly inspired the CAA study. Difficulty with DC-3's in Alaska and plexiglass domes in Africa gave the Army Air Forces trouble in the last war.

Current information requested concerns temperatures, corrosion, dust, mildew, humidity, rain, ice, snow, sleet, sunshine and altitude.

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The rates for advertising in this section are as follows: "Help Wanted," "Positions Wanted," "Aircraft Wanted or For Sale," and all other classifications \$1.00 a line, minimum charge \$4.00. Estimate bold face heads 30 letters and spaces per line; light body face 40 per line; box numbers add two lines. Terms, cash with order. Forms close 20 days preceding publication date. Rates for display advertisements upon request. Address all correspondence to Classified Advertising Department, AMERICAN AVIATION PUBLICATIONS, 1317 F Street N.W., Washington 4, D. C.

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AERONAUTICAL ENGINEERS: Structural Engineers, Aerodynamicists, and Layout Engineers having at least four years aircraft experience in addition to college degrees are urgently needed by large eastern manufacturer. Consideration will also be given to aircraft engineers interested in all phases of design and test engineering. In letter of application please give detailed account of your aircraft experience as well as other pertinent data you feel will assist us in fully and promptly considering your application. All replies will be held strictly confidential. Apply Employment Manager, Fairchild Aircraft, Hagerstown, Maryland.

Limited number positions open: airline dispatchers, station managers, ground personnel domestic and foreign bases; international airline. Box No. 548, American Aviation, 1317 F St., N.W., Washington 4, D. C.

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PORTABLE HEATER SALE: (Original cost \$583). Powerful Stewart-Warner 100,000 BTU gasoline-burning ground-type Aircraft Heaters. Complete with 1½ hp engine, blower, supercharger, and flexible ducts. Positively rebuilt and guaranteed \$195 freight prepaid in USA. **BERNSTEIN BROTHERS** (since 1890) Dept. L, Pueblo, Colorado.

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New Air Freight Handler Active

Air Freight Handling, Inc., has been organized to service air cargo handling for independent contract carriers. Ray Gambon, general manager, said the company already has a terminal building at Teterboro, N. J., and is moving between 75,000 and 100,000 pounds of freight daily.

Facilities which permit moving anything regardless of size are now being used by six companies.

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AAF All-Weather Airline Completes 6-Month Record

Six months of operations with a better than 98% record of flights during some of the year's worst flying weather has been completed by the Army Air Forces All-Weather Airline.

Douglas C-54's of the All-Weather Flying Center, a division of the Air Materiel Command, have been flying a five-day-a-week schedule from their home field at Clinton County Army Air Base, Wilmington, O., to Andrews Field, Md., outside of Washington, and return. The line has completed 123 round-trip flights and more than 20% of them were flown during severe instrument conditions. The tests are continuing.

All flights are made either under actual instrument conditions or "under the hood." No flight was cancelled because of bad weather and poor visibility. Initial order was that all take-offs and landings as well as intervening flights would be made under theoretical zero-zero conditions, so that when actual instrument conditions do not exist the pilot places red polaroid glass over the windshield and dons blue glasses, thereby blacking out anything outside the cockpit.

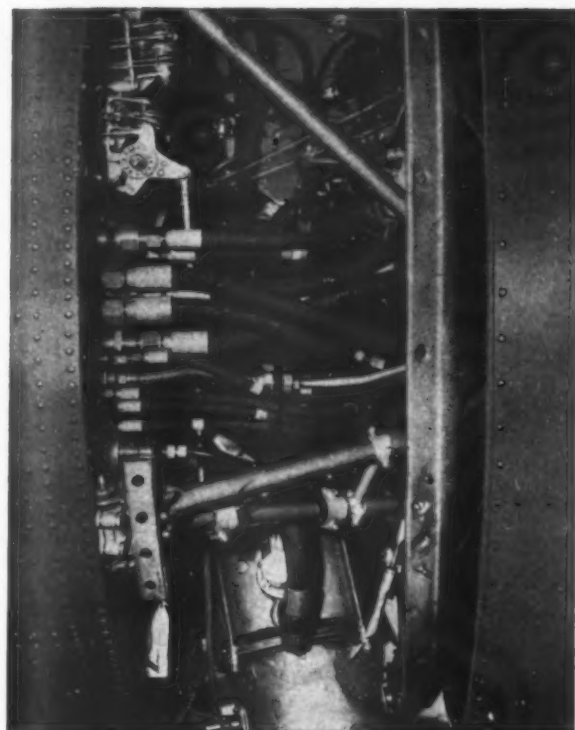
All landings now employ the use of GCA (Ground Control Approach.)

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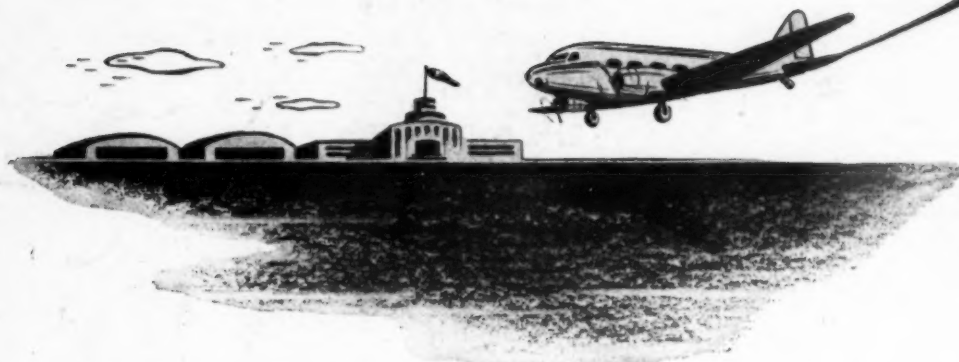
Pictured above is an installation of Aeroquip Fire Resistant Flexible Hose Lines and Self-Sealing Couplings in the Engine Nacelle of a Douglas DC-3. Similar installations made by AA, BNF, CAI, DAL, EAL, NAL, NWA, PAA, PCA, WAL, as well as many foreign air lines have proven so satisfactory that several of these transportation companies are converting their entire fleets.

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